

S/N 10/551,682

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:sssptaul55fxt

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * Welcome to STN International * * * * *

NEWS	1			Web Page for STN Seminar Schedule - N. America
NEWS	2	OCT	02	CA/CAPLUS enhanced with pre-1907 records from Chemisches Zentralblatt
NEWS	3	OCT	19	BEILSTEIN updated with new compounds
NEWS	4	NOV	15	Derwent Indian patent publication number format enhanced
NEWS	5	NOV	19	WPIX enhanced with XML display format
NEWS	6	NOV	30	ICSD reloaded with enhancements
NEWS	7	DEC	04	LINPADOCDB now available on STN
NEWS	8	DEC	14	BEILSTEIN pricing structure to change
NEWS	9	DEC	17	USPATOLD added to additional database clusters
NEWS	10	DEC	17	IMSDRUGCONF removed from database clusters and STN
NEWS	11	DEC	17	DGENE now includes more than 10 million sequences
NEWS	12	DEC	17	TOXCENTER enhanced with 2008 MeSH vocabulary in MEDLINE segment
NEWS	13	DEC	17	MEDLINE and LMEMLINE updated with 2008 MeSH vocabulary
NEWS	14	DEC	17	CA/CAPLUS enhanced with new custom IPC display formats
NEWS	15	DEC	17	STN Viewer enhanced with full-text patent content from USPATOLD
NEWS	16	JAN	02	STN pricing information for 2008 now available
NEWS	17	JAN	16	CAS patent coverage enhanced to include exemplified prophetic substances
NEWS	18	JAN	28	USPATFULL, USPAT2, and USPATOLD enhanced with new custom IPC display formats
NEWS	19	JAN	28	MARPAT searching enhanced
NEWS	20	JAN	28	USGENE now provides USPTO sequence data within 3 days of publication
NEWS	21	JAN	28	TOXCENTER enhanced with reloaded MEDLINE segment
NEWS	22	JAN	28	MEDLINE and LMEMLINE reloaded with enhancements
NEWS	23	FEB	08	STN Express, Version 8.3, now available
NEWS	24	FEB	20	PCI now available as a replacement to DPCI
NEWS	25	FEB	25	IFIREF reloaded with enhancements
NEWS	26	FEB	25	IMSPRODUCT reloaded with enhancements
NEWS	27	FEB	29	WPINDEX/WPIDS/WPIX enhanced with ECLA and current U.S. National Patent Classification

NEWS EXPRESS FEBRUARY 08 CURRENT WINDOWS VERSION IS V8.3,
AND CURRENT DISCOVER FILE IS DATED 20 FEBRUARY 2008

NEWS HOURS	STN Operating Hours Plus Help Desk Availability
NEWS LOGIN	Welcome Banner and News Items
NEWS IPC8	For general information regarding STN implementation of IPC 8

Enter NEWS followed by the item number or name to see news on that

S/N 10/551,682

specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

* * * * * STN Columbus * * * * *

FILE 'HOME' ENTERED AT 18:24:50 ON 27 MAR 2008

=> set plurals on perm
SET COMMAND COMPLETED

=> set abbr on perm
SET COMMAND COMPLETED

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	1.05	1.05

FILE 'USPATFULL' ENTERED AT 18:27:36 ON 27 MAR 2008
CA INDEXING COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'USPATOLD' ENTERED AT 18:27:36 ON 27 MAR 2008
CA INDEXING COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'USPAT2' ENTERED AT 18:27:36 ON 27 MAR 2008
CA INDEXING COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'CAPLUS' ENTERED AT 18:27:36 ON 27 MAR 2008
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'JAPIO' ENTERED AT 18:27:36 ON 27 MAR 2008
COPYRIGHT (C) 2008 Japanese Patent Office (JPO)- JAPIO

=> s (polypropylene or polypropene or (propylene or propene) (3a) (polymer# or copolymer# or homopolymer#)) and (tref or (temperature ris?) (2a) fraction?)
L1 1200 (POLYPROPYLENE OR POLYPROPENE OR (PROPYLENE OR PROPENE) (3A) (POLYMER# OR COPOLYMER# OR HOMOPOLYMER#)) AND (TREF OR (TEMPERATURE RIS?) (2A) FRACTION?)

=> s (ethylene or ethene) (3a) (copolymer#) and (tref or (temperature ris?) (2a) fraction?)
L2 1402 (ETHYLENE OR ETHENE) (3A) (COPOLYMER#) AND (TREF OR (TEMPERATURE RIS?) (2A) FRACTION?)

=> s l1 and l2
L3 1021 L1 AND L2

=> s (ethylene or ethene) (3a) (copolymer#) (s) (tref or (temperature ris?) (2a) fraction?)
L4 617 (ETHYLENE OR ETHENE) (3A) (COPOLYMER#) (S) (TREF OR (TEMPERATURE RIS?) (2A) FRACTION?)

=> s l1 and l4

S/N 10/551,682

L5 436 L1 AND L4

=> s (polypropylene or polypropene or (propylene or propene)(3a)(polymer# or copolymer# or homopolymer#))(s)(tref or (temperature ris?)(2a)fraction?)
L6 445 (POLYPROPYLENE OR POLYPROPENE OR (PROPYLENE OR PROPENE)(3A)(POLYMER# OR COPOLYMER# OR HOMOPOLYMER#))(S)(TREF OR (TEMPERATURE RIS?)(2A) FRACTION?)

=> s 14 and 16
L7 211 L4 AND L6

=> s 17 and ethylene (2a) content#
L8 132 L7 AND ETHYLENE (2A) CONTENT#

=> s 18 and isotactic?(15a)(propylene or propene or polypropylen?)
L9 76 L8 AND ISOTACTIC?(15A)(PROPYLENE OR PROPENE OR POLYPROPYLEN?)

=> d 19 1-76 ibib abs

L9 ANSWER 1 OF 76 USPATFULL on STN
ACCESSION NUMBER: 2008:80900 USPATFULL
TITLE: Elastomeric Polyolefin Compositions
INVENTOR(S): Massari, Paola, Ferrara, ITALY
Neumann, Andreas, Ferrara, ITALY
Collina, Gianni, Ferrara, ITALY
Fusco, Ofelia, Ferrara, ITALY
PATENT ASSIGNEE(S): Basell Poliolefine Italia s.r.l., Milan, ITALY, 20124
(non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2008071032	A1	20080320
APPLICATION INFO.:	US 2005-664575	A1	20050905 (11)
	WO 2005-EP54370		20050905
			20070403 PCT 371 date

	NUMBER	DATE
PRIORITY INFORMATION:	EP 2004-23627	20041004
	US 2004-616824P	20041007 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	Basell USA Inc., Delaware Corporate Center II, 2 Righter Parkway, Suite #300, Wilmington, DE, 19803, US	
NUMBER OF CLAIMS:	6	
EXEMPLARY CLAIM:	1-5	
LINE COUNT:	819	

AB An olefin polymer composition comprising (by weight, unless otherwise specified): A) 60-85% of a crystalline propylene homopolymer or a crystalline copolymer of propylene containing 3% or less of ethylene or C.sub.4-C.sub.10 α -olefin(s) or of combinations thereof, said homopolymer or copolymer having a Polydispersity Index (P.I.) value of from 4.5-6 and a content of isotactic pentads (mmmm), measured by .sup.13C NMR on the fraction insoluble in xylene at 25° C., higher than 96%; B) 15-40% of a partially amorphous copolymer of ethylene containing from 35% to 70% of propylene or C.sub.4-C.sub.10 α -olefin(s) or of combinations thereof, and optionally minor proportions of a diene. The said olefin polymer composition exhibits a value of elongation at break ranging from 150 to 600% according to ISO method 527.

L9 ANSWER 2 OF 76 USPATFULL on STN

ACCESSION NUMBER: 2008:30901 USPATFULL

TITLE: PROPYLENE RANDOM COPOLYMER AND PROCESS FOR THE PRODUCTION THEREOF

INVENTOR(S):
 Jaaskelainen, Pirjo, Porvoo, FINLAND
 Hafner, Norbert, Linz, FINLAND
 Pitkanen, Paivi, Halkia, FINLAND
 Gahleitner, Markus, Neuhofen, AUSTRIA
 Tuominen, Olli, Helsinki, FINLAND
 Toltsch, Wilfried, Marchtrenk, AUSTRIA

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2008027197	A1	20080131
APPLICATION INFO.:	US 2007-836644	A1	20070809 (11)
RELATED APPLN. INFO.:	Division of Ser. No. US 2004-482271, filed on 27 May 2004, PENDING A 371 of International Ser. No. WO 2002-EP7081, filed on 26 Jun 2002		

	NUMBER	DATE
PRIORITY INFORMATION:	EP 2001-115471	20010627
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	FAY SHARPE LLP, 1100 SUPERIOR AVENUE, SEVENTH FLOOR, CLEVELAND, OH, 44114, US	
NUMBER OF CLAIMS:	15	
EXEMPLARY CLAIM:	1-13	
NUMBER OF DRAWINGS:	7 Drawing Page(s)	
LINE COUNT:	629	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to a process for preparing a propylene random copolymer comprising polymerisation of propylene with a comonomer, said comonomer being ethylene or an α -olefin comprising at least four carbon atoms, in the presence of a catalyst in a multistage process comprising polymerisation of propylene with a comonomer in a first reaction zone including at least one slurry reactor to give a first polymerisation product, transferring said first product to a second reaction zone including at least one gas phase reactor and polymerisations of propylene with a comonomer in said gas phase reactor in the presence of said first polymerisation product, wherein the temperature in the gas phase reactor is at least 10° C. higher than in the slurry reactor and to a polymer obtainable by this process. Furthermore, the invention relates to a propylene random copolymer prepared by copolymerisation of propylene with a comonomer wherein the distribution of the comonomer determined according to the TREF method is multimodal, preferably bimodal, a propylene random copolymer prepared by copolymerisation of propylene with a comonomer wherein the copolymer is having an elution interval determined according to the TREF method of 50° C. or more, a propylene random copolymer prepared by copolymerisation of propylene with a comonomer, wherein the random copolymer is a unimodal polymer and the elution interval determined by the TREF method is given by the equation $Y \leq 4.5 \cdot m + 16$ wherein Y is the elution interval in ° C. and m is the percentage of ethylene in the copolymer in weight %, and to the use of such a copolymers for the production of a film, of an article by

blow moulding or injection moulding, of a fibre or of a pipe.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 3 OF 76 USPATFULL on STN

ACCESSION NUMBER: 2007:329306 USPATFULL

TITLE: PROPYLENE RANDOM COPOLYMER AND PROCESS FOR THE PRODUCTION THEREOF

INVENTOR(S): Jaaskelainen, Pirjo, Porvoo, FINLAND
Hafner, Norbert, Linz, AUSTRIA
Pitkanen, Paivi, Halkia, FINLAND
Gahleitner, Markus, Neuhofen, AUSTRIA
Tuominen, Olli, Helsinki, FINLAND
Toltsch, Wilfried, Marchtrenk, AUSTRIA

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2007287818	A1	20071213
APPLICATION INFO.:	US 2007-836657	A1	20070809 (11)
RELATED APPLN. INFO.:	Division of Ser. No. US 2004-482271, filed on 27 May 2004, PENDING A 371 of International Ser. No. WO 2002-EP7081, filed on 26 Jun 2002		

	NUMBER	DATE
PRIORITY INFORMATION:	EP 2001-115471	20010626
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	FAY SHARPE LLP, 1100 SUPERIOR AVENUE, SEVENTH FLOOR, CLEVELAND, OH, 44114, US	
NUMBER OF CLAIMS:	6	
EXEMPLARY CLAIM:	1-18	
NUMBER OF DRAWINGS:	9 Drawing Page(s)	
LINE COUNT:	606	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to a process for preparing a propylene random copolymer comprising polymerisation of propylene with a comonomer, said comonomer being ethylene or an α -olefin comprising at least four carbon atoms, in the presence of a catalyst in a multistage process comprising polymerisation of propylene with a comonomer in a first reaction zone including at least one slurry reactor to give a first polymerisation product, transferring said first product to a second reaction zone including at least one gas phase reactor and polymerisations of propylene with a comonomer in said gas phase reactor in the presence of said first polymerisation product, wherein the temperature in the gas phase reactor is at least 10° C. higher than in the slurry reactor and to a polymer obtainable by this process. Furthermore, the invention relates to a propylene random copolymer prepared by copolymerisation of propylene with a comonomer wherein the distribution of the comonomer determined according to the TREF method is multimodal, preferably bimodal, a propylene random copolymer prepared by copolymerisation of propylene with a comonomer wherein the copolymer is having an elution interval determined according to the TREF method of 50° C. or more, a propylene random copolymer prepared by copolymerisation of propylene with a comonomer, wherein the random copolymer is a unimodal polymer and the elution interval determined by the TREF method is given by the equation $Y \leq 4.5 \cdot m + 16$ wherein Y is the elution interval in ° C. and m is the percentage

S/N 10/551,682

of ethylene in the copolymer in weight %, and to the use of such a copolymers for the production of a film, of an article by blow moulding or injection moulding, of a fibre or of a pipe.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 4 OF 76 USPATFULL on STN

ACCESSION NUMBER: 2007:296298 USPATFULL
TITLE: Composition Suitable for Thermoformable Sheets and Articles Made Therefrom
INVENTOR(S): Rosell-Uriz, Ana, Zurich, SWITZERLAND
Torres, Enrique, Zurich, SWITZERLAND
Henschke, Olaf, Cham, SWITZERLAND
PATENT ASSIGNEE(S): Dow Global Technologies Inc., Midland, MI, UNITED STATES, 48674 (U.S. individual)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2007259143	A1	20071108
APPLICATION INFO.:	US 2005-661299	A1	20050831 (11)
	WO 2005-US31278		20050831
			20070222 PCT 371 date

	NUMBER	DATE
PRIORITY INFORMATION:	US 2004-606079P	20040831 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	THE DOW CHEMICAL COMPANY, INTELLECTUAL PROPERTY SECTION, P. O. BOX 1967, MIDLAND, MI, 48641-1967, US	
NUMBER OF CLAIMS:	21	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	5 Drawing Page(s)	
LINE COUNT:	1010	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Thermoformable sheet having a thickness of at least 300 micrometers comprising a blend of: (A) from 5 to 20% by weight of a propylene-ethylene copolymer having substantially isotactic propylene sequences, the propylene-ethylene copolymer having a melt flow rate from 4 to 30 g/10 min and comprising at least 70% by weight units derived from propylene and from about 10 to 20% by weight units derived from ethylene; and (B) from 80 to 95% by weight of a polypropylene having a melt flow rate of from 2 to 8 grams/10 minutes, wherein the melt flow rate of the blend is from 2 to 7 grams/10 minutes and wherein the blend exhibits: (1) room temperature Charpy toughness of at least 15 KJ/m.sup.2, (2) flexural modulus of at least 1000 MPa, (3) 0.sup.0 Charpy toughness of at least 2 KJ/m.sup.2, and (4) a value for haze of less than 40%.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 5 OF 76 USPATFULL on STN

ACCESSION NUMBER: 2007:290481 USPATFULL
TITLE: Multi-Layer, Pre-Stretched Elastic Articles
INVENTOR(S): Patel, Rajen M., Lake Jackson, TX, UNITED STATES
Chang, Andy, Houston, TX, UNITED STATES
PATENT ASSIGNEE(S): DOW GLOBAL TECHNOLOGIES INC., Midland, MI, UNITED STATES, 48674 (U.S. corporation)

NUMBER	KIND	DATE
--------	------	------

S/N 10/551,682

PATENT INFORMATION:	US 2007254176	A1	20071101
APPLICATION INFO.:	US 2006-552284	A1	20061024 (11)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2005-730338P	20051026 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	WHYTE HIRSCHBOECK DUDEK S.C., 555 EAST WELLS STREET, SUITE 1900, MILWAUKEE, WI, 53202, US	
NUMBER OF CLAIMS:	52	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	4 Drawing Page(s)	
LINE COUNT:	1789	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB In one embodiment the invention is an article comprising at least two layers, a first or low crystallinity layer comprising a low crystallinity polymer and a second or high crystallinity layer comprising a high crystallinity polymer. The high crystallinity polymer has a melting point as determined by differential scanning calorimetry (DSC) that is about the same or within less than 25 C of the melting point of the low crystallinity polymer. The article is elongated at a temperature below the melting point of the low crystallinity polymer in at least one direction to an elongation of at least about 50% of its original length or width, to form a pre-stretched article. Preferably, the high crystallinity layer is capable of undergoing plastic deformation upon the elongation.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 6 OF 76 USPATFULL on STN
ACCESSION NUMBER: 2007:285242 USPATFULL
TITLE: Isotactic Propylene Copolymers,
Their Preparation and Use
INVENTOR(S): Stevens, James C., Richmond, TX, UNITED STATES
Vanderlende, Daniel D., Sugarland, TX, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2007249798	A1	20071025
APPLICATION INFO.:	US 2007-769491	A1	20070627 (11)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 2004-988964, filed on 15 Nov 2004, GRANTED, Pat. No. US 7238759 Division of Ser. No. US 2002-139786, filed on 5 May 2002, GRANTED, Pat. No. US 6960635		

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-338881P	20011106 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	WHYTE HIRSCHBOECK DUDEK S.C., 555 EAST WELLS STREET, SUITE 1900, MILWAUKEE, WI, 53202, US	
NUMBER OF CLAIMS:	16	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	30 Drawing Page(s)	
LINE COUNT:	4676	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Unique copolymers comprising propylene, ethylene and/or one or more

unsaturated comonomers are characterized as having: at least one, preferably more than one, of the following properties: (i) ^{13}C NMR peaks corresponding to a regio-error at about 14.6 and about 15.7 ppm, the peaks of about equal intensity, (ii) a B-value greater than about 1.4 when the comonomer content of the copolymer is at least about 3 wt %, (iii) a skewness index, S_{ix} , greater than about -1.20, (iv) a DSC curve with a T_{me} that remains essentially the same and a T_{max} that decreases as the amount of comonomer in the copolymer is increased, and (v) an X-ray diffraction pattern that reports more gamma-form crystals than a comparable copolymer prepared with a Ziegler-Natta catalyst. These polypropylene polymers are made using a nonmetallocene, metal-centered, heteroaryl ligand catalyst. These polymers can be blended with other polymers, and are useful in the manufacture of films, sheets, foams, fibers and molded articles.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 7 OF 76 USPATFULL on STN

ACCESSION NUMBER: 2007:250696 USPATFULL
 TITLE: Propylene/Alpha-Olefins Block Interpolymers
 INVENTOR(S): Li Pi Shan, Colin, Pearland, TX, UNITED STATES
 Hazlitt, Lonnie G., Lake Jackson, TX, UNITED STATES
 Cheung, Yunwa Wilson, Pittsford, NY, UNITED STATES
 Poon, Benjamin C., Pearland, TX, UNITED STATES
 Hustad, Phillip D., Manvel, TX, UNITED STATES
 Kuhlman, Roger L., Lake Jackson, TX, UNITED STATES
 Carnahan, Edmund M., Fresno, TX, UNITED STATES
 Qiu, XiaoHua, Midland, MI, UNITED STATES
 Taha, Angela N., Missouri City, TX, UNITED STATES
 PATENT ASSIGNEE(S): Dow Global Technologies Inc., Midland, MI, UNITED STATES (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2007219334	A1	20070920
APPLICATION INFO.:	US 2007-686444	A1	20070315 (11)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2006-782746P	20060315 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	JONES DAY / DOW, 717 TEXAS, SUITE 3300, HOUSTON, TX, 77002, US	
NUMBER OF CLAIMS:	36	
EXEMPLARY CLAIM:	1	
LINE COUNT:	1951	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Embodiments of the invention provide a class of propylene/ α -olefin block interpolymers. The propylene/ α -olefin interpolymers are characterized by an average block index, ABI, which is greater than zero and up to about 1.0 and a molecular weight distribution, $M_{\text{w}}/M_{\text{n}}$, greater than about 1.3. Preferably, the block index is from about 0.2 to about 1. In addition or alternatively, the block propylene/ α -olefin interpolymers are characterized by having at least one fraction obtained by Temperature Rising Elution Fractionation ("TREF"), wherein the fraction has a block index greater than about 0.3 and up to about 1.0 and the propylene/ α -olefin interpolymers have a molecular weight distribution, $M_{\text{w}}/M_{\text{n}}$, greater than about 1.3.

S/N 10/551,682

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 8 OF 76 USPATFULL on STN

ACCESSION NUMBER: 2007:232031 USPATFULL
TITLE: Polymer film comprising a propylene random copolymer
INVENTOR(S): Jaaskelainen, Pirjo, Porvoo, FINLAND
Gahleitner, Markus, Neuhofen, AUSTRIA
Kirchberger, Manfred, Prambachkirchen, AUSTRIA
Pitkanen, Paivi, Halkia, FINLAND
PATENT ASSIGNEE(S): Borealis Technology OY (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2007203309	A1	20070830
APPLICATION INFO.:	US 2007-790254	A1	20070424 (11)
RELATED APPLN. INFO.:	Division of Ser. No. US 2004-481785, filed on 7 Apr 2004, PENDING A 371 of International Ser. No. WO 2002-EP7085, filed on 26 Jun 2002		

	NUMBER	DATE
PRIORITY INFORMATION:	EP 2001-115469	20010627
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	MILBANK, TWEED, HADLEY & MCCLOY LLP, INTERNATIONAL SQUARE BUILDING, 1850 K STRET, N.W., SUITE 1100, WASHINGTON, DC, 20006, US	

NUMBER OF CLAIMS: 14
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 5 Drawing Page(s)
LINE COUNT: 703

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates in a first embodiment to a polymer film comprising a propylene random copolymer with a total comonomer content of 4.5 to 12 mol % wherein the sealing initiation temperature SIT of the film is T.sub.m-30° C. or less, preferably T.sub.m-33° C. or less, in a second embodiment to a polymer film comprising a propylene random copolymer with a total comonomer content of 4.5 to 12 mol % wherein the film is having a relative reduction of the static friction value (inside-inside) from one to four days of 35% or more, preferably 40% or more, in a third embodiment to a polymer film comprising a propylene random copolymer with a total comonomer content of 4.5 to 12 mol % wherein the distribution of the comonomer in the random copolymer determined according to TREF method is multimodal, preferably bimodal, in a fourth embodiment to a polymer film comprising a propylene random copolymer with a total comonomer content of 4.5 to 12 mol %, wherein the copolymer is having an elution interval of 50° C. or more, and in a fifth embodiment to a polymer film comprising a copolymer with a total comonomer content of 4.5 to 12 mol % wherein the random copolymer is a unimodal polymer and the elution interval is determined by the equation $Y \leq 4.5 \cdot m + 16$ wherein Y is the elution interval in ° C. and m is the percentage of ethylene in the copolymer in weight %.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 9 OF 76 USPATFULL on STN

ACCESSION NUMBER: 2007:225643 USPATFULL

S/N 10/551,682

TITLE: Polymer film comprising a propylene random copolymer
INVENTOR(S): Jaaskelainen, Pirjo, Porvoo, FINLAND
Gahleitner, Markus, Neuhofen, AUSTRIA
Kirchberger, Manfred, Prambachkirchen, AUSTRIA
Pitkanen, Paivi, Halkia, FINLAND
PATENT ASSIGNEE(S): Borealis Technology OY (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2007197743	A1	20070823
APPLICATION INFO.:	US 2007-790226	A1	20070424 (11)
RELATED APPLN. INFO.:	Division of Ser. No. US 2004-481785, filed on 7 Apr 2004, PENDING A 371 of International Ser. No. WO 2002-EP7085, filed on 26 Jun 2002		

	NUMBER	DATE
PRIORITY INFORMATION:	EP 2001-115469	20010627
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	MILBANK, TWEED, HADLEY & MCCLOY LLP, INTERNATIONAL SQUARE BUILDING, 1850 K STRET, N.W., SUITE 1100, WASHINGTON, DC, 20006, US	
NUMBER OF CLAIMS:	48	
EXEMPLARY CLAIM:	1-3	
NUMBER OF DRAWINGS:	5 Drawing Page(s)	
LINE COUNT:	835	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates in a first embodiment to a polymer film comprising a propylene random copolymer with a total comonomer content of 4.5 to 12 mol % wherein the sealing initiation temperature SIT of the film is T.sub.m-30° C. or less, preferably T.sub.m-33° C. or less, in a second embodiment to a polymer film comprising a propylene random copolymer with a total comonomer content of 4.5 to 12 mol % wherein the film is having a relative reduction of the static friction value (inside-inside) from one to four days of 35% or more, preferably 40% or more, in a third embodiment to a polymer film comprising a propylene random copolymer with a total comonomer content of 4.5 to 12 mol % wherein the distribution of the comonomer in the random copolymer determined according to TREF method is multimodal, preferably bimodal, in a fourth embodiment to a polymer film comprising a propylene random copolymer with a total comonomer content of 4.5 to 12 mol %, wherein the copolymer is having an elution interval of 50° C. or more, and in a fifth embodiment to a polymer film comprising a copolymer with a total comonomer content of 4.5 to 12 mol % wherein the random copolymer is a unimodal polymer and the elution interval is determined by the equation $Y \leq 4.5 \cdot m + 16$ wherein Y is the elution interval in ° C. and m is the percentage of ethylene in the copolymer in weight %.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 10 OF 76 USPATFULL on STN
ACCESSION NUMBER: 2007:197816 USPATFULL
TITLE: Nonwoven fabric and fibers
INVENTOR(S): Ethiopia, Samuel, Schaumburg, IL, UNITED STATES
Claasen, Gert J., Adliswil, SWITZERLAND
Patel, Rajen M., Lake Jackson, TX, UNITED STATES

S/N 10/551,682

Stewart, Kenneth B., Lake Jackson, TX, UNITED STATES
Allgeuer, Thomas, Fetsenrainstr, SWITZERLAND
Knickerbocker, Edward N., Lake Jackson, TX, UNITED STATES
Pepper, Randy E., Lake Jackson, TX, UNITED STATES
Pressly, Thomas G., Angleton, TX, UNITED STATES

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2007173162	A1	20070726	
APPLICATION INFO.:	US 2005-578760	A1	20050408	(11)
	WO 2005-US12106		20050408	
			20061016	PCT 371 date

	NUMBER	DATE	
PRIORITY INFORMATION:	US 2004-566692P	20040430	(60)
	US 2004-609414P	20040913	(60)
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	APPLICATION		
LEGAL REPRESENTATIVE:	THE DOW CHEMICAL COMPANY, INTELLECTUAL PROPERTY SECTION,, P. O. BOX 1967, MIDLAND, MI, 48641-1967, US		
NUMBER OF CLAIMS:	35		
EXEMPLARY CLAIM:	1		
LINE COUNT:	1567		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to nonwoven webs or fabrics. In particular, the present invention relates to nonwoven webs having superior abrasion resistance and excellent softness characteristics. The nonwoven materials comprise fibers made from of a polymer blend of isotactic polypropylene, reactor grade propylene based elastomers or plastomers, and optionally, a homogeneously branched ethylene/alpha olefin plastomer or elastomer. The isotactic polypropylene can be homopolymer polypropylene, and random copolymers of propylene and one or more alpha-olefins. The reactor grade propylene based elastomers or plastomers have a molecular weight distribution of less than about 3.5, and a heat of fusion less than about 90 joules/gm. In particular, the reactor grade propylene based elastomers or plastomers contains from about 3 to about 15 percent by weight of units derived from an ethylene, and a melt flow rate of from about 2 to about 200 grams/10 minutes. The present invention also relates to cold drawn textured fibers comprising of a polymer blend of isotactic polypropylene and reactor grade propylene based elastomers or plastomers.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 11 OF 76 USPATFULL on STN
ACCESSION NUMBER: 2007:140622 USPATFULL
TITLE: Isotactic Propylene Copolymer
Fibers, Their Preparation and Use
INVENTOR(S): Stevens, James C., 2026 Pecan Trail Drive, Richmond, TX, UNITED STATES 77469-6719
Vanderlende, Daniel D., 5003 Kingsland Court, Sugar Land, TX, UNITED STATES 77479
Ethiopia, Samuel, 5714 Montclair Hill Lane, Rosharon, TX, UNITED STATES 77583
PATENT ASSIGNEE(S): DOW GLOBAL TECHNOLOGIES INC., Midland, MI, UNITED STATES, 48674 (U.S. corporation)

S/N 10/551,682

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2007122613	A1	20070531
	US 7344775	B2	20080318
APPLICATION INFO.:	US 2007-669342	A1	20070131 (11)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 2005-148895, filed on 9 Jun 2005, GRANTED, Pat. No. US 7199203 Division of Ser. No. US 2002-289138, filed on 5 Nov 2002, GRANTED, Pat. No. US 6906160		

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-338881P	20011106 (60)
	US 2002-380148P	20020505 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	WHYTE HIRSCHBOECK DUDEK S.C., 555 EAST WELLS STREET, SUITE 1900, MILWAUKEE, WI, 53202, US	
NUMBER OF CLAIMS:	15	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	25 Drawing Page(s)	
LINE COUNT:	3558	
CAS INDEXING IS AVAILABLE FOR THIS PATENT.		

AB Fibers comprising a propylene homopolymer or a copolymer of propylene and at least one of ethylene and one or more unsaturated comonomers exhibit desirable properties. The homopolymers are characterized as having .sup.13C NMR peaks corresponding to a regio-error at about 14.6 and about 15.7 ppm, the peaks of about equal intensity. The copolymers are characterized as (A) comprising at least about 60 weight percent (wt %) of units derived from propylene, and (B) having at least one of the following properties: (i) .sup.13C NMR peaks corresponding to a regio-error at about 14.6 and about 15.7 ppm, the peaks of about equal intensity, (ii) a B-value greater than about 1.4 when the comonomer content of the copolymer is at least about 3 wt %, (iii) a skewness index, S.sub.ix, greater than about -1.20, (iv) a DSC curve with a T.sub.me that remains essentially the same and a T.sub.max that decreases as the amount of comonomer in the copolymer is increased, and (v) an X-ray diffraction pattern that reports more gamma-form crystals than a comparable copolymer prepared with a Ziegler-Natta (Z-N) catalyst.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 12 OF 76 USPATFULL on STN

ACCESSION NUMBER: 2007:135258 USPATFULL

TITLE: Semicrystalline propylene polymer composition for producing biaxially stretched polypropylene films

INVENTOR(S): Suhm, Jorgen, Worms-Weinsheim, GERMANY, FEDERAL REPUBLIC OF

 Rauschenberger, Volker, Eisenberg, GERMANY, FEDERAL REPUBLIC OF

 Lilge, Dieter, Limburgerhof, GERMANY, FEDERAL REPUBLIC OF

 Hingmann, Roland, UNITED STATES

 Stricker, Florian, Freiburg, GERMANY, FEDERAL REPUBLIC OF

NUMBER	KIND	DATE
--------	------	------

S/N 10/551,682

PATENT INFORMATION: US 2007117940 A1 20070524
APPLICATION INFO.: US 2007-624606 A1 20070118 (11)
RELATED APPLN. INFO.: Continuation of Ser. No. US 2002-168215, filed on 19
Jun 2002, PENDING A 371 of International Ser. No. WO
2000-EP12511, filed on 11 Dec 2000

	NUMBER	DATE
PRIORITY INFORMATION:	DE 1999-19962130	19991221
	DE 2000-10004660	20000203
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	NOVAK DRUCE DELUCA & QUIGG, LLP, 1300 EYE STREET NW, SUITE 1000 WEST TOWER, WASHINGTON, DC, 20005, US	
NUMBER OF CLAIMS:	9	
EXEMPLARY CLAIM:	1-10	
NUMBER OF DRAWINGS:	1 Drawing Page(s)	
LINE COUNT:	1422	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to a semicrystalline propylene polymer composition prepared by polymerizing propylene, ethylene and/or C.sub.4-C.sub.18-1-alkenes, where at least 50 mol % of the monomer units present stem from the polymerization of propylene and at least 20% by weight of the propylene polymer composition is the result of a polymerization using metallocene catalysts,

with a melting point T.sub.M of from 65 to 170° C., where the semicrystalline propylene polymer composition can be broken down into from 65 to 85% by weight of a principal component A, from 10 to 35% by weight of an ancillary component B and from 0 to 25% by weight of an ancillary component C,

and where the proportions of components A, B and C are determined by carrying out TREF (temperature rising elution fractionation) in which that fraction of the propylene polymer composition which is soluble in xylene at (T.sub.M/2)+7.5° C. is firstly dissolved and separated off and then, as the temperature rises, at all of the higher temperatures 70° C., 75° C., 80° C., 85° C., 90° C., 94° C., 98° C., 102° C., 107° C., 112° C., 117° C., 122° C. and 125° C., the fractions soluble within the temperature range between this elution temperature and the preceding elution temperature are eluted,

and the principal component A is formed by all of the fractions which are eluted at above (T.sub.M/2)+7.5° C. and have an average molar mass M.sub.N [sic] (number average)≥120,000 g/mol,

the ancillary component B is formed by the fraction which is eluted at (T.sub.M/2)+7.5° C., and

the ancillary component C is formed by all of the fractions which are eluted at above (T.sub.M/2)+7.5° C. and have an average molar mass M.sub.n (number average)<120,000 g/mol. A process for preparing the semicrystalline propylene polymer composition is also described, as are the use of the semicrystalline propylene polymer composition for producing films, fibers or moldings, and the films, fibers and moldings made from this composition.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 13 OF 76 USPATFULL on STN
ACCESSION NUMBER: 2007:106735 USPATFULL
TITLE: Multi-Layer, Elastic Articles

S/N 10/551,682

INVENTOR(S): Patel, Rajen M., Lake Jackson, TX, UNITED STATES
Chang, Andy C., Houston, TX, UNITED STATES
Peng, Hong, Lake Jackson, TX, UNITED STATES
Karande, Seema V., Pearland, TX, UNITED STATES
Poon, Benjamin C., Pearland, TX, UNITED STATES
Cheung, Yunwa Wilson, Pittsford, NY, UNITED STATES
PATENT ASSIGNEE(S): Dow Global Technologies Inc., Midland, MI, UNITED STATES (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2007092704	A1	20070426
APPLICATION INFO.:	US 2006-552563	A1	20061025 (11)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2005-730705P	20051026 (60)
	US 2005-754087P	20051227 (60)
	US 2006-824728P	20060906 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	JONES DAY / DOW, 717 TEXAS, SUITE 3300, HOUSTON, TX, 77002, US	
NUMBER OF CLAIMS:	156	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	7 Drawing Page(s)	
LINE COUNT:	4170	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention is an article comprising at least two layers, a low crystallinity layer and a high crystallinity layer. One or both layers is capable of being elongated so that a pre-stretched article is capable of being formed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 14 OF 76 USPATFULL on STN

ACCESSION NUMBER: 2007:42276 USPATFULL

TITLE: Propylene-based copolymers, a method of making the fibers and articles made from the fibers

INVENTOR(S): Chang, Andy C., Houston, TX, UNITED STATES
Van Dun, Jozef J.I., Bellaire, TX, UNITED STATES
Peng, Hong, Lake Jackson, TX, UNITED STATES
Pepper, Randy E., Lake Jackson, TX, UNITED STATES
Knickerbocker, Edward N., Lake Jackson, TX, UNITED STATES
Patel, Rajen M., Lake Jackson, TX, UNITED STATES
Day, Byron P., Canton, GA, UNITED STATES
Jordan, Joy F., Marietta, GA, UNITED STATES
Doufas, Antonios K., Lake Jackson, TX, UNITED STATES
Liu, Lizhi, Lake Jackson, TX, UNITED STATES
Englebert, Stephen M., Woodstock, GA, UNITED STATES
Richard, Renette E., Dunwoody, GA, UNITED STATES
Sanders, Christian L., Decatur, GA, UNITED STATES
Sharma, Varunesh, Atlanta, GA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2007036972	A1	20070215
APPLICATION INFO.:	US 2006-498481	A1	20060803 (11)
RELATED APPLN. INFO.:	Division of Ser. No. US 2005-83891,		filed on 18 Mar

S/N 10/551,682

2005, GRANTED, Pat. No. US 7101622

	NUMBER	DATE
PRIORITY INFORMATION:	US 2004-554664P	20040319 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	THE DOW CHEMICAL COMPANY, INTELLECTUAL PROPERTY SECTION,, P. O. BOX 1967, MIDLAND, MI, 48641-1967, US	
NUMBER OF CLAIMS:	17	
EXEMPLARY CLAIM:	1	
LINE COUNT:	1522	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Fibers that exhibit good elasticity or extensibility and tenacity, and low modulus are prepared from propylene-based copolymers. The propylene-based copolymers comprise at least about 50 weight percent (wt %) of units derived from propylene and at least about 8 wt % of units derived from one or more comonomers other than propylene, e.g., ethylene. Particularly preferred propylene copolymers are characterized as having ¹³C NMR peaks corresponding to a regio-error at about 14.6 and about 15.7 ppm, the peaks of about equal intensity. In one aspect of the invention, fibers are subjected to stress-induced crystallization by subjecting the fiber to tensile elongation during draw.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 15 OF 76 USPATFULL on STN

ACCESSION NUMBER: 2007:12210 USPATFULL
TITLE: Impact resistant polyolefin compositions
INVENTOR(S): News, Jean, Ferrara, ITALY
Massari, Paola, Ferrara, ITALY
Zimmermann, Hans-Jurgen, Hofheim am Taunus, GERMANY,
FEDERAL REPUBLIC OF
PATENT ASSIGNEE(S): Bassell Polioefine Italia s.r.l., Milan, ITALY, 20124
(non-U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2007010625	A1	20070111	
APPLICATION INFO.:	US 2004-551682	A1	20040329	(10)
	WO 2004-EP3307		20040329	
			20060719	PCT 371 data

	NUMBER	DATE
PRIORITY INFORMATION:	EP 2003-7669	20030403
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	BASELL USA INC., INTELLECTUAL PROPERTY, 912 APPLETON ROAD, ELKTON, MD, 21921, US	
NUMBER OF CLAIMS:	4	
EXEMPLARY CLAIM:	1	
LINE COUNT:	773	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Olefin polymer composition comprising (by weight, unless otherwise specified): A) 60-95% of a propylene homopolymer or copolymer having a Polydispersity Index (P.I.) value of from 4.6 to 10 and a content of isotactic pentads (mmmm), measured by ¹³C NMR on the fraction insoluble in xylene at 25° C., higher than 98 molar, B)

S/N 10/551,682

5-40% of a copolymer of ethylene containing from 40% to 70% of propylene or C.sub.4-C.sub.10 α -olefins) or of combinations thereof, and optionally minor proportions of a diene; said composition having a Temperature Rising Elution Fractionation (TREF) profile, obtained by fractionation in xylene and collection of fractions at temperatures of 40° C., 80° C. and 90° C., in which the ethylene content Y of the fraction collected at 90° C. satisfies the following relation (1): $Y \leq 0.8 + 0.035X + 0.0091X^{.2}$ wherein X is the ethylene content of the fraction collected at 40° C. and both X and Y are expressed in percent by weight, and a value of intrinsic viscosity $[\eta]$ of the fraction soluble in xylene at 25° C. of from 1.8 to 4.2 dl/g.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 16 OF 76 USPATFULL on STN

ACCESSION NUMBER: 2007:12201 USPATFULL

TITLE: Impact modification of thermoplastics with ethylene/alpha-olefin interpolymers

INVENTOR(S): Kapur, Mridula, Lake Jackson, TX, UNITED STATES
Demirors, Mehmet, Pearland, TX, UNITED STATES
Wu, Shaofu, Sugar Land, TX, UNITED STATES
Cheung, Yunwa W., Lake Jackson, TX, UNITED STATES
Jain, Pradeep, Lake Jackson, TX, UNITED STATES
Fuchs, David W., Clute, TX, UNITED STATES

PATENT ASSIGNEE(S): Dow Global Technologies Inc., Midland, MI, UNITED STATES (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2007010616	A1	20070111
APPLICATION INFO.:	US 2006-376838	A1	20060315 (11)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. WO 2005-US8917, filed on 17 Mar 2005, PENDING		

	NUMBER	DATE
PRIORITY INFORMATION:	US 2005-717928P	20050916 (60)
	US 2004-553906P	20040317 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	JONES DAY / DOW, 717 TEXAS, SUITE 3300, HOUSTON, TX, 77002, US	
NUMBER OF CLAIMS:	31	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	16 Drawing Page(s)	
LINE COUNT:	3777	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compositions having good impact performance can be made from a thermoplastic (e.g., a polyolefin such as polypropylene or HDPE) and an ethylene multi-block copolymer. The compositions are easily molded and often have particular utility in making, for example, automotive facia, parts and other household articles.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 17 OF 76 USPATFULL on STN

ACCESSION NUMBER: 2006:196428 USPATFULL

S/N 10/551,682

TITLE: Propylene copolymer compositions having a good
low-temperature impact toughness and a high
transparency
INVENTOR(S): Fuchs, Alexander, Ferrara, ITALY
Morhard, Friederike, Koln, GERMANY, FEDERAL REPUBLIC OF
PATENT ASSIGNEE(S): Basell Polyolefine GmbH, Wesseling, GERMANY, FEDERAL
REPUBLIC OF, DE 50389 (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2006167185	A1	20060727
APPLICATION INFO.:	US 2003-517580	A1	20030610 (10)
	WO 2003-EP6043		20030610
			20050802 PCT 371 date

	NUMBER	DATE
PRIORITY INFORMATION:	DE 2002-10226184	20020612
	US 2002-394615P	20020709 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	BASELL USA INC., INTELLECTUAL PROPERTY, 912 APPLETON ROAD, ELKTON, MD, 21921, US	
NUMBER OF CLAIMS:	15	
EXEMPLARY CLAIM:	1	
LINE COUNT:	1064	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to a propylene copolymer composition comprising A) a propylene polymer containing from 0 to 10% by weight of olefins other than propylene and B) at least one propylene copolymer containing from 5 to 40% by weight of olefins other than propylene, where the propylene polymer A and the propylene copolymer B are present as separate phases and the propylene copolymer composition has a haze value of $\leq 30\%$, based on a path length of the propylene copolymer composition of 1 mm, and the brittle/tough transition temperature of the propylene copolymer composition is $\leq -15^{\circ}\text{C}$.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 18 OF 76 USPATFULL on STN
ACCESSION NUMBER: 2006:181669 USPATFULL
TITLE: Polypropylene fibres suitable for thermally bonded
non-woven fabrics
INVENTOR(S): Sartori, Franco, Ferrara, ITALY
Sartori, Gabriella, S. Maria Maddalena, ITALY
PATENT ASSIGNEE(S): Bassell Poliolefine Italia S.p.A., Milan, ITALY, 20124
(non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2006154064	A1	20060713
APPLICATION INFO.:	US 2003-529021	A1	20030923 (10)
	WO 2003-EP10705		20030923
			20050324 PCT 371 date

	NUMBER	DATE
PRIORITY INFORMATION:	EP 2002-21420	20020925
	US 2002-60416988	20021008
DOCUMENT TYPE:	Utility	

S/N 10/551,682

FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: BASSELL USA INC., INTELLECTUAL PROPERTY, 912 APPLETON
ROAD, ELKTON, MD, 21921, US

NUMBER OF CLAIMS: 19
EXEMPLARY CLAIM: 1
LINE COUNT: 1238

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A fibre for thermal bonding comprising a propylene polymer composition having an MFR value from 4 to 50 g/10 min. The said composition is selected from (i) a crystalline propylene random copolymer or polymer composition containing at least 0.8% by weight of ethylene and optionally one or more C.sub.4-C.sub.10 α -olefins and having a melting temperature of 155° C. or higher, a content of fraction soluble in xylene at room temperature lower than 5 wt %, a value of the ratio of the polymer fraction collected at the temperature range from 25° to 95° C. by TREF with xylene to the xylene soluble fraction, higher than 8; and (ii) a crystalline propylene polymer composition having a melting temperature of 153° C. or higher, a content of fraction soluble in xylene at room temperature lower than 10 wt % and containing at least 0.64 wt % of ethylene and/or C.sub.4-C.sub.10 α -olefin recurring unit and comprising (I) 20-80 wt % of a crystalline propylene homopolymer and/or crystalline propylene random copolymer containing up to 1.5% by weight of ethylene and/or C.sub.4-C.sub.10 α -olefin and (II) 20-80 wt % of a crystalline random copolymer of propylene with ethylene or a C.sub.4-C.sub.10 α -olefin. A polymer composition having an MFR value from 4 to 50 g/10 min, an ethylene content of at least 0.64 wt % and comprising (A) 20-80 wt % of a crystalline propylene homopolymer or crystalline propylene random copolymer containing up to 1.5 wt % of ethylene and/or C.sub.4-C.sub.10 α -olefin and (B) 20-80 wt % of a crystalline random copolymer of propylene with higher than 5 to 9 wt % of ethylene. Non-woven fabrics that are prepared with the said fibres are useful for hygienic applications.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 19 OF 76 USPATFULL on STN
ACCESSION NUMBER: 2006:167984 USPATFULL
TITLE: Impact resistant polymer blends of crystalline polypropylene and partially crystalline, low molecular weight impact modifiers
INVENTOR(S): Stevens, James C., Richmond, TX, UNITED STATES
Vanderlende, Daniel D., Sugarland, TX, UNITED STATES
Ansems, Patricia, West Columbia, TX, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2006142497	A1	20060629
	US 7250471	B2	20070731
APPLICATION INFO.:	US 2006-359091	A1	20060222 (11)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 2004-884420, filed on 2 Jul 2004, PENDING Division of Ser. No. US 2002-289122, filed on 5 Nov 2002, GRANTED, Pat. No. US 6943215		

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-338881P	20011106 (60)

S/N 10/551,682

US 2002-378203P 20020505 (60)
DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: WHYTE HIRSCHBOECK DUDEK S.C., 555 EAST WELLS STREET,
SUITE 1900, MILWAUKEE, WI, 53202, US
NUMBER OF CLAIMS: 18
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 20 Drawing Page(s)
LINE COUNT: 3239
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Polymer blends that exhibit good impact resistance comprise a crystalline polypropylene matrix and a partly crystalline copolymer impact modifier with a molecular weight lower than that of the matrix polymer. The matrix polymer can comprise any crystalline propylene homo- or copolymer. The impact modifying copolymers are characterized as comprising at least about 60 weight percent (wt %) of units derived from propylene and, in certain embodiments, as having at least one, preferably two or more, of the following properties: (i) ¹³C NMR peaks corresponding to a regio-error at about 14.6 and about 15.7 ppm, the peaks of about equal intensity, (ii) a B-value greater than about 1.4 when the comonomer content of the copolymer is at least about 3 wt %, (iii) a skewness index, S_{ix}, greater than about -1.20, (iv) a DSC curve with a T_{me} that remains essentially the same and a T_{max} that decreases as the amount of comonomer in the copolymer is increased, and (v) an X-ray diffraction pattern that reports more gamma-form crystals than a comparable copolymer prepared with a Ziegler-Natta (Z-N) catalyst.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 20 OF 76 USPATFULL on STN
ACCESSION NUMBER: 2006:167981 USPATFULL
TITLE: Crystallization of polypropylene using a semi-crystalline, branched or coupled nucleating agent
INVENTOR(S): Stevens, James C., Richmond, TX, UNITED STATES
Vanderlende, Daniel D., Sugarland, TX, UNITED STATES
Ansems, Patricia, West Columbia, TX, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2006142494	A1	20060629
	US 7250470	B2	20070731
APPLICATION INFO.:	US 2006-359020	A1	20060222 (11)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 2004-914800, filed on 10 Aug 2004, PENDING Division of Ser. No. US 2002-289145, filed on 5 Nov 2002, GRANTED, Pat. No. US 6927256		

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-338881P	20011106 (60)
	US 2002-378204P	20020505 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	WHYTE HIRSCHBOECK DUDEK S.C., 555 EAST WELLS STREET, SUITE 1900, MILWAUKEE, WI, 53202, US	
NUMBER OF CLAIMS:	6	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	22 Drawing Page(s)	
LINE COUNT:	3180	
CAS INDEXING IS AVAILABLE FOR THIS PATENT.		

AB A method of nucleating a propylene homo- or copolymer, the method comprising contacting the propylene polymer with a semi-crystalline branched or coupled polymeric nucleating agent under nucleation conditions. In one embodiment, the propylene homopolymer is characterized as having ¹³C NMR peaks corresponding to a regio-error at about 14.6 and about 15.7 ppm, the peaks of about equal intensity. In another embodiment, the copolymer is characterized as comprising at least about 60 weight percent (wt %) of units derived from propylene, and as having at least one of the following properties: (i) ¹³C NMR peaks corresponding to a regio-error at about 14.6 and about 15.7 ppm, the peaks of about equal intensity, (ii) a B-value greater than about 1.4 when the comonomer content, i.e., the units derived from ethylene and/or the unsaturated comonomer(s), of the copolymer is at least about 3 wt %, (iii) a skewness index, S_{sub.ix}, greater than about -1.20, (iv) a DSC curve with a T_{sub.me} that remains essentially the same and a T_{sub.max} that decreases as the amount of comonomer, i.e., the units derived from ethylene and/or the unsaturated comonomer(s), in the copolymer is increased, and (v) an X-ray diffraction pattern that reports more gamma-form crystals than a comparable copolymer prepared with a Ziegler-Natta (Z-N) catalyst.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 21 OF 76 USPATFULL on STN

ACCESSION NUMBER: 2006:137701 USPATFULL

TITLE: Catalysts for polymerizing olefins and process for producing olefin polymer

INVENTOR(S): Yabunouchi, Nobuhiro, Chiba, JAPAN
Sadashima, Takanori, Chiba, JAPAN

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2006116280	A1	20060601
APPLICATION INFO.:	US 2003-542753	A1	20030122 (10)
	WO 2003-JP524		20030122
			20050720 PCT 371 date
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	APPLICATION		
LEGAL REPRESENTATIVE:	STEPTOE & JOHNSON LLP, 1330 CONNECTICUT AVENUE, N.W., WASHINGTON, DC, 20036, US		
NUMBER OF CLAIMS:	23		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	2 Drawing Page(s)		
LINE COUNT:	2257		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A solid catalyst component for olefin polymerization obtained by reacting the following compounds (i), (ii) and (iv); or (i), (ii), (iii) and (iv): (i) a halogen-containing titanium compound; (ii) an alkoxy-containing magnesium compound obtained by reacting metal magnesium, an alcohol and a halogen and/or a halogen-containing compound containing at least 0.0001 gram atom of halogen atoms per mol of the metal magnesium; (iii) a halogen-containing silicon compound; and (iv) an electron-donating compound represented by the following general formula (I): ##STR1## wherein R¹ represents a linear or branched alkyl group having 1 or more carbon atoms; and R² and R³ independently represent a linear or branched C_{sub.1-20} alkyl group.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

S/N 10/551,682

L9 ANSWER 22 OF 76 USPATFULL on STN

ACCESSION NUMBER: 2006:68241 USPATFULL

TITLE: Flexible propylene copolymer compositions having a high transparency

INVENTOR(S): Fuchs, Alexander, Ferrara, ITALY
Morhard, Friederike, Ferrara, ITALY

PATENT ASSIGNEE(S): Basell Polyolefine GmbH, Wesseling, GERMANY, FEDERAL
REPUBLIC OF, 50389 (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2006058463	A1	20060316
APPLICATION INFO.:	US 2003-517588	A1	20030610 (10)
	WO 2003-EP6042		20030610
			20041209 PCT 371 date

	NUMBER	DATE
PRIORITY INFORMATION:	DE 2002-10226183	20020612
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	BASELL USA INC., INTELLECTUAL PROPERTY, 912 APPLETON ROAD, ELKTON, MD, 21921, US	
NUMBER OF CLAIMS:	12	
EXEMPLARY CLAIM:	1-16	
LINE COUNT:	1233	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to a propylene copolymer composition comprising A) a propylene copolymer containing from 1 to 20% by weight of olefins other than propylene and B) at least one propylene copolymer containing from 5 to 98% by weight of olefins other than propylene, where the propylene copolymer composition is obtainable by means of a two-stage or multistage polymerization using a catalyst system based on metallocene compounds which is used in both stages.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 23 OF 76 USPATFULL on STN

ACCESSION NUMBER: 2006:67157 USPATFULL

TITLE: Polypropylene fibres suitable for spunbonded non-woven fabrics

INVENTOR(S): Sartori, Franco, Ferrara, ITALY
Lonardo, Angelo, Napoli, ITALY
Herben, Pierre, Bruxelles, BELGIUM

PATENT ASSIGNEE(S): Basell Poliolefine Italia S.p.A, Milan, ITALY, 20124
(non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2006057374	A1	20060316
APPLICATION INFO.:	US 2003-529022	A1	20030923 (10)
	WO 2003-EP10707		20030923
			20050324 PCT 371 date

	NUMBER	DATE
PRIORITY INFORMATION:	EP 2002-21421	20020925
	US 2002-416992P	20021008 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	

S/N 10/551,682

LEGAL REPRESENTATIVE: BASELL USA INC., INTELLECTUAL PROPERTY, 912 APPLETON ROAD, ELKTON, MD, 21921, US

NUMBER OF CLAIMS: 10

EXEMPLARY CLAIM: 1

LINE COUNT: 1271

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A fibre for spunbonded fabrics comprising a propylene polymer composition (A) having an MFR (1) value from 6 to 150 g/10 min and being selected from (i) a crystalline propylene random copolymer or crystalline propylene polymer composition en containing at least 0.8% by weight of ethylene and having a melting temperature of 153° C. or higher, a content of fraction soluble in xylene at room temperature lower than 10% by weight, and a value of the ratio of the polymer fraction collected at the temperature range from 25° to 95° C. to the xylene soluble fraction at room temperature higher than 4; and (ii) a crystalline propylene polymer composition having a melting temperature of 153° C. or higher, a content of fraction soluble in xylene at room temperature lower than 10% by weight; the said composition containing at least 0.64 wt % of ethylene or a C.sub.4-C.sub.10 a-olefin recurring unit and comprising: (1) 20-80 wt % of a crystalline propylene polymer containing up to 1.5 wt % of ethylene and/or C.sub.4-C.sub.10 a-olefin; and (II) 20-80 wt % of a crystalline propylene random copolymer selected from (IIa) a copolymer of propylene with 0.8 to 10 wt % of ethylene and/or (IIb) a copolymer of propylene with 1.5 to 18 wt % of a C4-C10 a-olefin. Said polymer composition (A) is obtainable by way of chemical degradation of a precursor polymer composition (A) having MFR values (MFR (2)) of from 0.5 to 50 g/10 min, provided that the ratio of MFR (1) to MFR (2) be from 1.5 to 60. Propylene polymer composition (ii) as described above and non-woven fabrics that are prepared with the said fibres. The said fabric is useful for coverstock and diapers.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 24 OF 76 USPATFULL on STN

ACCESSION NUMBER: 2006:22261 USPATFULL

TITLE: Transition metal compound, ligand system, catalyst system and its use for the polymerization and copolymerization of olefins

INVENTOR(S): Schottek, Jorg, Frankfurt, GERMANY, FEDERAL REPUBLIC OF
Oberhoff, Markus, Speyer, GERMANY, FEDERAL REPUBLIC OF
Bingel, Carsten, Kriftel, GERMANY, FEDERAL REPUBLIC OF
Fischer, David, Breunigweiler, GERMANY, FEDERAL REPUBLIC OF
Weiss, Horst, Neuhausen, GERMANY, FEDERAL REPUBLIC OF
Winter, Andreas, Neuleiningen, GERMANY, FEDERAL REPUBLIC OF
Fraaije, Volker, Frankfurt, GERMANY, FEDERAL REPUBLIC OF
Maier, Ralph-Dieter, Hoergertshausen, GERMANY, FEDERAL REPUBLIC OF
Bidell, Wolfgang, Mannheim, GERMANY, FEDERAL REPUBLIC OF
Paczkowski, Nicola, Loveland, OH, UNITED STATES
Suhm, Juergen, Worms-Weinsheim, GERMANY, FEDERAL REPUBLIC OF
Kratzer, Roland, Hofheim, GERMANY, FEDERAL REPUBLIC OF

NUMBER KIND DATE

S/N 10/551,682

PATENT INFORMATION: US 2006020096 A1 20060126
APPLICATION INFO.: US 2005-131251 A1 20050518 (11)
RELATED APPLN. INFO.: Division of Ser. No. US 2002-168952, filed on 24 Jun
2002, PENDING A 371 of International Ser. No. WO
2000-EP12642, filed on 3 Dec 2000

	NUMBER	DATE
PRIORITY INFORMATION:	DE 1999-19962905	19991223
	DE 2000-10044983	20000911
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	NOVAK DRUCE DELUCA & QUIGG, LLP, 1300 EYE STREET NW, SUITE 400 EAST, WASHINGTON, DC, 20005, US	
NUMBER OF CLAIMS:	6	
EXEMPLARY CLAIM:	1-24	
LINE COUNT:	3377	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A process for the polymerization of olefins, in particular a process for the copolymerization of propylene with further olefins, is carried out in the presence of highly active catalyst systems comprising specifically selected metallocenes, in particular ones which bear different substituents in position 2 position 4 on an indenyl ligand. Novel polypropylene copolymers can be obtained by this process.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 25 OF 76 USPATFULL on STN
ACCESSION NUMBER: 2006:4708 USPATFULL
TITLE: Films comprising isotactic propylene copolymers
INVENTOR(S): Tau, Li-Min, Lake Jackson, TX, UNITED STATES
Chum, Pak-Wing S., Lake Jackson, TX, UNITED STATES
Karande, Seema, Pearland, TX, UNITED STATES
Bosnyak, Clive, Missouri City, TX, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2006004167	A1	20060105
APPLICATION INFO.:	US 2005-216805	A1	20050831 (11)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 2002-289168, filed on 5 Nov 2002, PENDING		

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-338881P	20011106 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	WHYTE HIRSCHBOECK DUDEK S.C., 555 EAST WELLS STREET, SUITE 1900, MILWAUKEE, WI, 53202, US	
NUMBER OF CLAIMS:	14	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	34 Drawing Page(s)	
LINE COUNT:	3592	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Films with excellent machine direction (MD) tear properties comprise at least one layer made from a polymer comprising: (A) at least 50 weight percent (wt %) propylene; and

(B) at least 5 wt % ethylene and/or one or more unsaturated comonomers.

Representative of component (B) unsaturated comonomers are the C.sub.4-20 α -olefins, C.sub.4-20 dienes, styrenic compounds, and the like. Preferably, the film has at least one of a (i) haze value of less than about 10, (ii) 45 degree gloss of greater than about 65, and (iii) dart value of greater than about 100 g/mil. In one preferred embodiment, the layer comprises a copolymer characterized as having at least one of the following properties: (i) ¹³C NMR peaks corresponding to a regio-error at about 14.6 and about 15.7 ppm, the peaks of about equal intensity, (ii) a B-value greater than about 1.4 when the comonomer content, i.e., the units derived from ethylene and/or the unsaturated comonomer(s), of the copolymer is at least about 3 wt %, (iii) a skewness index, S.sub.ix, greater than about -1.20, (iv) a DSC curve with a T.sub.me that remains essentially the same and a T.sub.max that decreases as the amount of comonomer, i.e., the units derived from ethylene and/or the unsaturated comonomer(s), in the copolymer is increased, and (v) an X-ray diffraction pattern that reports more gamma-form crystals than a comparable copolymer prepared with a Ziegler-Natta (Z-N) catalyst.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 26 OF 76 USPATFULL on STN

ACCESSION NUMBER: 2005:281731 USPATFULL

TITLE: Isotactic propylene copolymer
fibers, their preparation and use

INVENTOR(S): Stevens, James C., Richmond, TX, UNITED STATES
Vanderlende, Daniel D., Sugar Land, TX, UNITED STATES
Ethiopia, Samuel, Rosharon, TX, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005245686	A1	20051103
	US 7199203	B2	20070403
APPLICATION INFO.:	US 2005-148895	A1	20050609 (11)
RELATED APPLN. INFO.:	Division of Ser. No. US 2002-289138, filed on 5 Nov 2002, GRANTED, Pat. No. US 6906160		

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-338881P	20011106 (60)
	US 2002-380148P	20020505 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	WHYTE HIRSCHBOECK DUDEK S.C., 555 EAST WELLS STREET, SUITE 1900, MILWAUKEE, WI, 53202, US	
NUMBER OF CLAIMS:	27	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	25 Drawing Page(s)	
LINE COUNT:	3589	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Fibers comprising a propylene homopolymer or a copolymer of propylene and at least one of ethylene and one or more unsaturated comonomers exhibit desirable properties. The homopolymers are characterized as having ¹³C NMR peaks corresponding to a regio-error at about 14.6 and about 15.7 ppm, the peaks of about equal intensity. The copolymers are characterized as (A) comprising at least about 60 weight percent (wt %) of units derived from propylene, and (B) having at least one of the following properties: (i) ¹³C NMR peaks corresponding to a regio-error at about 14.6 and about 15.7 ppm, the peaks of about equal intensity, (ii) a B-value greater than about 1.4 when the comonomer

S/N 10/551,682

content of the copolymer is at least about 3 wt %, (iii) a skewness index, $S_{sub.ix}$, greater than about -1.20, (iv) a DSC curve with a $T_{sub.me}$ that remains essentially the same and a $T_{sub.max}$ that decreases as the amount of comonomer in the copolymer is increased, and (v) an X-ray diffraction pattern that reports more gamma-form crystals than a comparable copolymer prepared with a Ziegler-Natta (Z-N) catalyst.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 27 OF 76 USPATFULL on STN

ACCESSION NUMBER: 2005:280691 USPATFULL

TITLE: Propylene-based copolymers, a method of making the fibers and articles made from the fibers

INVENTOR(S): Chang, Andy C., Houston, TX, UNITED STATES
Peng, Hong, Lake Jackson, TX, UNITED STATES
Van Dun, Jozef J.I., Bellaire, TX, UNITED STATES
Pepper, Randy E., Lake Jackson, TX, UNITED STATES
Knickerbocker, Edward N., Lake Jackson, TX, UNITED STATES
Doufas, Antonios K., Lake Jackson, TX, UNITED STATES
Patel, Rajen M., Lake Jackson, TX, UNITED STATES
Liu, Lizhi, Lake Jackson, TX, UNITED STATES
Day, Byron P., Canton, GA, UNITED STATES
Englebert, Stephen M., Woodstock, GA, UNITED STATES
Jordan, Joy F., Marietta, GA, UNITED STATES
Richard, Renette E., Dunwoody, GA, UNITED STATES
Sanders, Christian L., Decatur, GA, UNITED STATES
Sharma, Varunesh, Atlanta, GA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005244638	A1	20051103
	US 7101622	B2	20060905
APPLICATION INFO.:	US 2005-83891	A1	20050318 (11)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2004-554664P	20040319 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	THE DOW CHEMICAL COMPANY, INTELLECTUAL PROPERTY SECTION, P. O. BOX 1967, MIDLAND, MI, 48641-1967, US	
NUMBER OF CLAIMS:	42	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	9 Drawing Page(s)	
LINE COUNT:	1606	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Fibers that exhibit good elasticity or extensibility and tenacity, and low modulus are prepared from propylene-based copolymers. The propylene-based copolymers comprise at least about 50 weight percent (wt %) of units derived from propylene and at least about 8 wt % of units derived from one or more comonomers other than propylene, e.g., ethylene. Particularly preferred propylene copolymers are characterized as having ^{13}C NMR peaks corresponding to a regio-error at about 14.6 and about 15.7 ppm, the peaks of about equal intensity. In one aspect of the invention, fibers are subjected to stress-induced crystallization by subjecting the fiber to tensile elongation during draw.

S/N 10/551,682

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 28 OF 76 USPATFULL on STN

ACCESSION NUMBER: 2005:145013 USPATFULL

TITLE: Polypropylene type aqueous dispersion, polypropylene type composite aqueous emulsion composition and its use

INVENTOR(S): Ashihara, Teruaki, Mie, JAPAN
Onoe, Masato, Mie, JAPAN
Hata, Kazuyuki, Mie, JAPAN
Shimizu, Fumihiko, Kanagawa, JAPAN
Sato, Naomasa, Kanagawa, JAPAN
Zanka, Yukihiro, Mie, JAPAN
Nakayama, Kouichi, Mie, JAPAN

PATENT ASSIGNEE(S): MITSUBISHI CHEMICAL CORPORATION, Tokyo, JAPAN (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005124753	A1	20050609
APPLICATION INFO.:	US 2004-972914	A1	20041026 (10)
RELATED APPLN. INFO.:	Continuation of Ser. No. WO 2003-JP5357, filed on 25 Apr 2003, UNKNOWN		

	NUMBER	DATE
PRIORITY INFORMATION:	JP 2002-127539	20020426
	JP 2002-273960	20020919
	JP 2002-273972	20020909
	JP 2002-283376	20020927

DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C., 1940 DUKE STREET, ALEXANDRIA, VA, 22314, US

NUMBER OF CLAIMS: 20

EXEMPLARY CLAIM: 1

LINE COUNT: 3866

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A polypropylene type aqueous dispersion comprising the following components (a) to (c):

(a) a polypropylene type polymer 100 parts by weight
and/or a modified polypropylene type polymer
(b) a surfactant 1 to 100 parts by weight, and
(c) water 100 to 1,000 parts by weight,

wherein the component (a) has a main chain having the following features (1) and (2) and dispersion particles in the dispersion have an average particle size of at most 0.5 μm ,

Feature (1) when observing a peak derived from a carbon atom of a methyl group in a propylene unit chain part comprising a head-to-tail bond by ^{13}C -NMR and fixing a chemical shift of a peak top at a peak attributable to pentad expressed by mmmm to 21.8 ppm, a ratio (S.sub.1/S) of an area S.sub.1 of a peak of a peak top at 21.8 ppm to a total area S of peaks at from 19.8 ppm to 22.1 ppm is at least 10% and at most 60%, and when an area of a peak (mmmr) of a peak top at 21.5 to 21.6 ppm is expressed as S.sub.2, $4+2\text{S.sub.1}/\text{S.sub.2}>5$, and Feature (2) a content ratio (mol ratio) of propylene unit (A): other olefin unit (B)

S/N 10/551,682

is from 100:0 to 90:10.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 29 OF 76 USPATFULL on STN

ACCESSION NUMBER: 2005:132058 USPATFULL

TITLE: Isotactic propylene copolymers,
their preparation and use

INVENTOR(S): Stevens, James C., Richmond, TX, UNITED STATES
Vanderlende, Daniel D., Sugarland, TX, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005113524	A1	20050526
	US 7238759	B2	20070703
APPLICATION INFO.:	US 2004-988964	A1	20041115 (10)
RELATED APPLN. INFO.:	Division of Ser. No. US 2002-139786, filed on 5 May 2002, PENDING		

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-338881P	20011106 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	WHYTE HIRSCHBOECK DUDEK S.C., 555 EAST WELLS STREET, SUITE 1900, MILWAUKEE, WI, 53202, US	
NUMBER OF CLAIMS:	1	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	30 Drawing Page(s)	
LINE COUNT:	4607	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Unique copolymers comprising propylene, ethylene and/or one or more unsaturated comonomers are characterized as having: at least one, preferably more than one, of the following properties: (i) ^{sup}.13C NMR peaks corresponding to a regio-error at about 14.6 and about 15.7 ppm, the peaks of about equal intensity, (ii) a B-value greater than about 1.4 when the comonomer content of the copolymer is at least about 3 wt %, (iii) a skewness index, S_{ix}, greater than about -1.20, (iv) a DSC curve with a T_{me} that remains essentially the same and a T_{max} that decreases as the amount of comonomer in the copolymer is increased, and (v) an X-ray diffraction pattern that reports more gamma-form crystals than a comparable copolymer prepared with a Ziegler-Natta catalyst These polypropylene polymers are made using a nonmetallocene, metal-centered, heteroaryl ligand catalyst. These polymers can be blended with other polymers, and are useful in the manufacture of films, sheets, foams, fibers and molded articles.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 30 OF 76 USPATFULL on STN

ACCESSION NUMBER: 2005:63758 USPATFULL

TITLE: Films comprising isotactic propylene
copolymers

INVENTOR(S): Tau, Li-Min, Lake Jackson, TX, UNITED STATES
Chum, Pak-Wing S., Lake Jackson, TX, UNITED STATES
Karande, Seema, Pearland, TX, UNITED STATES
Bosnyak, Clive, Missouri City, TX, UNITED STATES

NUMBER	KIND	DATE
-----	-----	-----

S/N 10/551,682

PATENT INFORMATION: US 2005054800 A1 20050310
US 6946535 B2 20050920
APPLICATION INFO.: US 2004-967849 A1 20041018 (10)
RELATED APPLN. INFO.: Continuation of Ser. No. US 2002-289168, filed on 5 Nov
2002, PENDING

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-338881P	20011106 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	WHYTE HIRSCHBOECK DUDEK S.C., 555 EAST WELLS STREET, SUITE 1900, MILWAUKEE, WI, 53202	
NUMBER OF CLAIMS:	20	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	34 Drawing Page(s)	
LINE COUNT:	3697	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Films with excellent machine direction (MD) tear properties comprise at least one layer made from a polymer comprising:

(A) at least 50 weight percent (wt %) propylene; and

(B) at least 5 wt % ethylene and/or one or more unsaturated comonomers.

Representative of component (B) unsaturated comonomers are the C.sub.4-20 α -olefins, C.sub.4-20 dienes, styrenic compounds, and the like. Preferably, the film has at least one of a (i) haze value of less than about 10, (ii) 45 degree gloss of greater than about 65, and (iii) dart value of greater than about 100 g/mil. In one preferred embodiment, the layer comprises a copolymer characterized as having at least one of the following properties: (i) ¹³C NMR peaks corresponding to a regio-error at about 14.6 and about 15.7 ppm, the peaks of about equal intensity, (ii) a B-value greater than about 1.4 when the comonomer content, i.e., the units derived from ethylene and/or the unsaturated comonomer(s), of the copolymer is at least about 3 wt %, (iii) a skewness index, S.sub.ix, greater than about -1.20, (iv) a DSC curve with a T.sub.me that remains essentially the same and a T.sub.max that decreases as the amount of comonomer, i.e., the units derived from ethylene and/or the unsaturated comonomer(s), in the copolymer is increased, and (v) an X-ray diffraction pattern that reports more gamma-form crystals than a comparable copolymer prepared with a Ziegler-Natta (Z-N) catalyst.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 31 OF 76 USPATFULL on STN
ACCESSION NUMBER: 2005:50669 USPATFULL
TITLE: Crystallization of polypropylene using a
semi-crystalline, branched or coupled nucleating agent
INVENTOR(S): Stevens, James C., Richmond, TX, UNITED STATES
Vanderlende, Daniel D., Sugarland, TX, UNITED STATES
Ansems, Patricia, West Columbia, TX, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005043470	A1	20050224
	US 7060754	B2	20060613
APPLICATION INFO.:	US 2004-914800	A1	20040810 (10)
RELATED APPLN. INFO.:	Division of Ser. No. US 2002-289145,		filed on 5 Nov

2002, PENDING

	NUMBER	DATE
	-----	-----
PRIORITY INFORMATION:	US 2001-338881P	20011106 (60)
	US 2002-378204P	20020505 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	WHYTE HIRSCHBOECK DUDEK S.C., 555 EAST WELLS STREET, SUITE 1900, MILWAUKEE, WI, 53202	
NUMBER OF CLAIMS:	16	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	22 Drawing Page(s)	
LINE COUNT:	3323	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method of nucleating a propylene homo- or copolymer, the method comprising contacting the propylene polymer with a semi-crystalline branched or coupled polymeric nucleating agent under nucleation conditions. In one embodiment, the propylene homopolymer is characterized as having ¹³C NMR peaks corresponding to a regio-error at about 14.6 and about 15.7 ppm, the peaks of about equal intensity. In another embodiment, the copolymer is characterized as comprising at least about 60 weight percent (wt %) of units derived from propylene, and as having at least one of the following properties: (i) ¹³C NMR peaks corresponding to a regio-error at about 14.6 and about 15.7 ppm, the peaks of about equal intensity, (ii) a B-value greater than about 1.4 when the comonomer content, i.e., the units derived from ethylene and/or the unsaturated comonomer(s), of the copolymer is at least about 3 wt %, (iii) a skewness index, S_{ix}, greater than about -1.20, (iv) a DSC curve with a T_{me} that remains essentially the same and a T_{max} that decreases as the amount of comonomer, i.e., the units derived from ethylene and/or the unsaturated comonomer(s), in the copolymer is increased, and (v) an X-ray diffraction pattern that reports more gamma-form crystals than a comparable copolymer prepared with a Ziegler-Natta (Z-N) catalyst.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 32 OF 76 USPATFULL on STN

ACCESSION NUMBER: 2004:315407 USPATFULL
 TITLE: Impact resistant polymer blends of crystalline polypropylene and partially crystalline, low molecular weight impact modifiers
 INVENTOR(S): Stevens, James C., Richmond, TX, UNITED STATES
 Vanderlende, Daniel D., Sugarland, TX, UNITED STATES
 Ansems, Patricia, West Columbia, TX, UNITED STATES

	NUMBER	KIND	DATE
	-----	-----	-----
PATENT INFORMATION:	US 2004249084	A1	20041209
	US 7109269	B2	20060919
APPLICATION INFO.:	US 2004-884420	A1	20040702 (10)
RELATED APPLN. INFO.:	Division of Ser. No. US 2002-289122, filed on 5 Nov 2002, PENDING		

	NUMBER	DATE
	-----	-----
PRIORITY INFORMATION:	US 2001-338881P	20011106 (60)
	US 2002-378203P	20020505 (60)
DOCUMENT TYPE:	Utility	

S/N 10/551,682

FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: WHYTE HIRSCHBOECK DUDEK S.C., 555 EAST WELLS STREET,
SUITE 1900, MILWAUKEE, WI, 53202
NUMBER OF CLAIMS: 18
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 20 Drawing Page(s)
LINE COUNT: 3279

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Polymer blends that exhibit good impact resistance comprise a crystalline polypropylene matrix and a partly crystalline copolymer impact modifier with a molecular weight lower than that of the matrix polymer. The matrix polymer can comprise any crystalline propylene homo- or copolymer. The impact modifying copolymers are characterized as comprising at least about 60 weight percent (wt %) of units derived from propylene and, in certain embodiments, as having at least one, preferably two or more, of the following properties: (i) ¹³C NMR peaks corresponding to a regio-error at about 14.6 and about 15.7 ppm, the peaks of about equal intensity, (ii) a B-value greater than about 1.4 when the comonomer content of the copolymer is at least about 3 wt %, (iii) a skewness index, S_{ix}, greater than about -1.20, (iv) a DSC curve with a T_{me} that remains essentially the same and a T_{max} that decreases as the amount of comonomer in the copolymer is increased, and (v) an X-ray diffraction pattern that reports more gamma-form crystals than a comparable copolymer prepared with a Ziegler-Natta (Z-N) catalyst.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 33 OF 76 USPATFULL on STN

ACCESSION NUMBER: 2004:308139 USPATFULL
TITLE: Multistep process for the (co) polymerization of olefins
INVENTOR(S): Resconi, Luigi, Ferrara, ITALY
Baruzzi, Giovanni, Ferrara, ITALY

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004242815	A1	20041202
APPLICATION INFO.:	US 2004-482877	A1	20040106 (10)
	WO 2002-EP7894		20020711

	NUMBER	DATE
PRIORITY INFORMATION:	EP 2001-202727	20010717
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	BASELL USA INC., INTELLECTUAL PROPERTY, 912 APPLETON ROAD, ELKTON, MD, 21921	
NUMBER OF CLAIMS:	18	
EXEMPLARY CLAIM:	1	
LINE COUNT:	1040	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A multistep process for the polymerization of one or more olefins comprising a first step of polymerizing one or more of said olefins in the presence of a catalyst of the Ziegler-Natta type, a step wherein the polymer obtained in the first step is contacted with a catalyst system comprising an half-sandwich metallocene compound, followed by a second polymerization step. The amount of homo- or copolymer of olefins produced in the first polymerization step is between 10% to 90% by weight of the total amount of polymer produced.

S/N 10/551,682

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 34 OF 76 USPATFULL on STN

ACCESSION NUMBER: 2004:308108 USPATFULL

TITLE: Thermoplastic elastomer compositions

INVENTOR(S):
Tau, Lin-Min, Lake Jackson, TX, UNITED STATES
Cheung, Yunwa Wilson, Lake Jackson, TX, UNITED STATES
Diehl, Charles F., Lake Jackson, TX, UNITED STATES
Hazlitt, Lonnie G., Lake Jackson, TX, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004242784	A1	20041202
APPLICATION INFO.:	US 2003-428353	A1	20030503 (10)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 2002-289168, filed on 5 Nov 2002, PENDING		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	APPLICATION		
LEGAL REPRESENTATIVE:	THE DOW CHEMICAL COMPANY, INTELLECTUAL PROPERTY SECTION, P. O. BOX 1967, MIDLAND, MI, 48641-1967		
NUMBER OF CLAIMS:	26		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	19 Drawing Page(s)		
LINE COUNT:	2329		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A unique thermoplastic olefin composition having: (a) at least 40 percent by weight of a propylene-alpha olefin copolymer based on the total weight of polymers in the composition, the propylene-alpha olefin copolymer having at least 60 percent by weight units derived from propylene, at least 6 percent by weight units derived from an alpha olefin, a molecular weight distribution less than 3.5, and a broad composition distribution; and (b) at least 20 percent by weight of a polypropylene based on the total weight of polymers in the composition, the polypropylene having at least 93 percent by weight units derived from propylene, a molecular weight distribution of greater than 3.5, a heat of fusion greater than the heat of fusion exhibited by the propylene-alpha olefin copolymer, and a melting point T.sub.max of at least 120° C.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 35 OF 76 USPATFULL on STN

ACCESSION NUMBER: 2004:282741 USPATFULL

TITLE: Propylene/ethylene block copolymer, blushing-resistant transparent polypropylene resin for molding, elastomer for molding, and molded article obtained from these

INVENTOR(S):
Terano, Minoru, Daigakushukusha A-35, 1-50, Asahidai, Tatsunokuchi-machi, Nomi-gun Ishikawa 923-1211, JAPAN
Matsukawa, Tetsuya, Kanagawa, JAPAN
Satake, Hideshi, Kanagawa, JAPAN
Takahashi, Masato, Kanagawa, JAPAN

PATENT ASSIGNEE(S):
Chisso Petrochemical Corporation, Tokyo, JAPAN (non-U.S. corporation)
Japan Science and Technology Corporation, Saitama, JAPAN (non-U.S. corporation)
Terano, Minoru, Ishikawa, JAPAN (non-U.S. individual)

NUMBER	KIND	DATE
-----	-----	-----

S/N 10/551,682

PATENT INFORMATION: US 6815508 B1 20041109
WO 2000023489 20000427
APPLICATION INFO.: US 2001-807842 20010709 (9)
WO 1999-JP5769 19991019

	NUMBER	DATE
PRIORITY INFORMATION:	JP 1998-297228	19981019
	JP 1998-297231	19981019
	JP 1998-297232	19981019
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	GRANTED	
PRIMARY EXAMINER:	Teskin, Fred	
LEGAL REPRESENTATIVE:	Wenderoth, Lind & Ponack, L.L.P.	
NUMBER OF CLAIMS:	7	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	12 Drawing Figure(s); 5 Drawing Page(s)	
LINE COUNT:	1675	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A polypropylene/ethylene block copolymer, which has a poly(ethylene-co-propylene) segment content of 5 to 100 weight %, excluding 100 weight %, and a total ethylene content of 2 to 95 weight %. (a) The block polymer comprises polypropylene segments and poly(ethylene-co-propylene) segments chemically bonded thereto, and (b) the polypropylene segments and the poly(ethylene-co-propylene) segments have been synthesized in the presence of an olefin polymerization catalyst comprising an organometallic compound and a solid catalyst component comprising either titanium and a halogen, or titanium, magnesium, and a halogen. The block copolymer has a weight-average molecular weight of 100,000 or higher, is suitable for producing general-purpose molded articles, and has an excellent balance among mechanical properties, impact resistance, thermal properties, transparency, moldability, and other properties.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 36 OF 76 USPATFULL on STN

ACCESSION NUMBER: 2004:268469 USPATFULL
TITLE: Propylene random copolymer and process for the production thereof
INVENTOR(S): Jaaskelainen, Pirjo, Porvoo, FINLAND
Hafner, Norbert, Linz, AUSTRIA
Pitkanen, Paivi, Halkia, FINLAND
Gahleitner, Markus, Neuhofen, AUSTRIA
Tuominen, Olli, Helsinki, FINLAND
Toltsch, Wilfried, Marchtrenk, AUSTRIA

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004210012	A1	20041021
APPLICATION INFO.:	US 2004-482271	A1	20040527 (10)
	WO 2002-EP7081		20020626

	NUMBER	DATE
PRIORITY INFORMATION:	EP 2001-115471	20010627
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	Richard J Minnich, Fay Sharpe Fagan Minnich & McKee, 7th Floor, 1100 Superior Avenue, Cleveland, OH,	

S/N 10/551,682

44114-2518
NUMBER OF CLAIMS: 29
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 7 Drawing Page(s)
LINE COUNT: 703

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to a process for preparing a propylene random copolymer comprising polymerisation of propylene with a comonomer, said comonomer being ethylene or an α -olefin comprising at least four carbon atoms, in the presence of a catalyst in a multistage process comprising polymerisation of propylene with a comonomer in a first reaction zone including at least one slurry reactor to give a first polymerisation product, transferring said first product to a second reaction zone including at least one gas phase reactor and polymerisations of propylene with a comonomer in said gas phase reactor in the presence of said first polymerisation product, wherein the temperature in the gas phase reactor is at least 10° C. higher than in the slurry reactor and to a polymer obtainable by this process. Furthermore, the invention relates to a propylene random copolymer prepared by copolymerisation of propylene with a comonomer wherein the distribution of the comonomer determined according to the TREF method is multimodal, preferably bimodal, a propylene random copolymer prepared by copolymerisation of propylene with a comonomer wherein the copolymer is having an elution interval determined according to the TREF method of 50° C. or more, a propylene random copolymer prepared by copolymerisation of propylene with a comonomer, wherein the random copolymer is a unimodal polymer and the elution interval determined by the TREF method is given by the equation $Y \leq 4.5.m + 16$ wherein Y is the elution interval in °C. and m is the percentage of ethylene in the copolymer in weight %, and to the use of such a copolymers for the production of a film, of an article by blow moulding or injection moulding, of a fibre or of a pipe.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 37 OF 76 USPATFULL on STN
ACCESSION NUMBER: 2004:227206 USPATFULL
TITLE: Polymer film comprising a propylene random copolymer
INVENTOR(S): Jaaskelainen, Pirjo, Porvoo, FINLAND
Gahleitner, Markus, Neuhofen, AUSTRALIA
Kirchberger, Manfred, Prambachkirchen, AUSTRIA
Pitkanen, Paivi, Halkia, FINLAND

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004175591	A1	20040909
APPLICATION INFO.:	US 2004-481785	A1	20040407 (10)
	WO 2002-EP7085		20020626

	NUMBER	DATE
PRIORITY INFORMATION:	EP 2001-115469	20010627
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	MILBANK, TWEED, HADLEY & MCCLOY LLP, INTERNATIONAL SQUARE BUILDING, 1825 EYE STRET, N.W. #1100, WASHINGTON, DC, 20006	
NUMBER OF CLAIMS:	23	

S/N 10/551,682

EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 5 Drawing Page(s)
LINE COUNT: 778
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates in a first embodiment to a polymer film comprising a propylene random copolymer with a total comonomer content of 4.5 to 12 mol % wherein the sealing initiation temperature SIT of the film is T.sub.m-30° C. or less, preferably T.sub.m-33° C. or less, in a second embodiment to a polymer film comprising a propylene random copolymer with a total comonomer content of 4.5 to 12 mol % wherein the film is having a relative reduction of the static friction value (inside-inside) from one to four days of 35% or more, preferably 40% or more, in a third embodiment to a polymer film comprising a propylene random copolymer with a total comonomer content of 4.5 to 12 mol % wherein the distribution of the comonomer in the random copolymer determined according to TREF method is multimodal, preferably bimodal, in a fourth embodiment to a polymer film comprising a propylene random copolymer with a total comonomer content of 4.5 to 12 mol %, wherein the copolymer is having an elution interval of 50° C. or more, and in a fifth embodiment to a polymer film comprising a copolymer with a total comonomer content of 4.5 to 12 mol % wherein the random copolymer is a unimodal polymer and the elution interval is determined by the equation

$$Y \leq 4.5 \cdot m + 16$$

wherein Y is the elution interval in ° C. and

m is the percentage of ethylene in the copolymer in weight %.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 38 OF 76 USPATFULL on STN
ACCESSION NUMBER: 2004:114905 USPATFULL
TITLE: Thermoplastic elastomer compositions
INVENTOR(S): Tau, Li-Min, Lake Jackson, TX, UNITED STATES
Cheung, Yunwa Wilson, Lake Jackson, TX, UNITED STATES
Diehl, Charles F., Lake Jackson, TX, UNITED STATES
Hazlitt, Lonnie G., Lake Jackson, TX, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004087751	A1	20040506
APPLICATION INFO.:	US 2003-429651	A1	20030505 (10)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 2002-289168, filed on 5 Nov 2002, PENDING		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	APPLICATION		
LEGAL REPRESENTATIVE:	THE DOW CHEMICAL COMPANY, INTELLECTUAL PROPERTY SECTION, P. O. BOX 1967, MIDLAND, MI, 48641-1967		
NUMBER OF CLAIMS:	26		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	19 Drawing Page(s)		
LINE COUNT:	2348		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A unique thermoplastic olefin composition having: (a) at least 40 percent by weight of a propylene-alpha olefin copolymer based on the total weight of polymers in the composition, the propylene-alpha olefin

L9 ANSWER 39 OF 76 USPATFULL on STN

TITLE: Films comprising isotactic propylene
copolymers

INVENTOR(S): Tau, Li-Min, Lake Jackson, TX, UNITED STATES
 Chum, Pak-Wing S., Lake Jackson, TX, UNITED STATES
 Karande, Seema, Pearland, TX, UNITED STATES
 Bosnyak, Clive, Missouri City, TX, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004082750	A1	20040429
	US 6919407	B2	20050719
APPLICATION INFO.:	US 2003-641978	A1	20030815 (10)
RELATED APPLN. INFO.:	Division of Ser. No. US 2002-289168, filed on 5 Nov 2002, PENDING		

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-338881P	20011106 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	WHYTE HIRSCHBOECK DUDEK S.C., 555 EAST WELLS STREET, SUITE 1900, MILWAUKEE, WI, 53202	
NUMBER OF CLAIMS:	29	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	34 Drawing Page(s)	
LINE COUNT:	3749	

AB Films with excellent machine direction (MD) tear properties comprise at least one layer made from a polymer comprising:

(A) at least 50 weight percent (wt %) propylene; and

(B) at least 5 wt % ethylene and/or one or more unsaturated comonomers.

Representative of component (B) unsaturated comonomers are the C.sub.4-20 α -olefins, C.sub.4-20 dienes, styrenic compounds, and the like. Preferably, the film has at least one of a (i) haze value of less than about 10, (ii) 45 degree gloss of greater than about 65, and (iii) dart value of greater than about 100 g/mil. In one preferred embodiment, the layer comprises a copolymer characterized as having at least one of the following properties: (i) .sup.13C NMR peaks corresponding to a regio-error at about 14.6 and about 15.7 ppm, the peaks of about equal intensity, (ii) a B-value greater than about 1.4 when the comonomer content, i.e., the units derived from ethylene and/or the unsaturated comonomer(s), of the copolymer is at least about 3 wt %,

S/N 10/551,682

(iii) a skewness index, S.sub.ix, greater than about -1.20, (iv) a DSC curve with a T.sub.me that remains essentially the same and a T.sub.max that decreases as the amount of comonomer, i.e., the units derived from ethylene and/or the unsaturated comonomer(s), in the copolymer is increased, and (v) an X-ray diffraction pattern that reports more gamma-form crystals than a comparable copolymer prepared with a Ziegler-Natta (Z-N) catalyst.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 40 OF 76 USPATFULL on STN

ACCESSION NUMBER: 2004:95502 USPATFULL

TITLE: Propylene/ethylene block copolymer, blushing-resistant transparent polypropylene resin for molding, elastomer for molding, and molded article obtained therefrom

INVENTOR(S): Terano, Minoru, Ishikawa, JAPAN
Matsukawa, Tetsuya, Kanagawa, JAPAN
Satake, Hideshi, Kanagawa, JAPAN
Takahashi, Masato, Kanagawa, JAPAN

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004072957	A1	20040415
	US 6812292	B2	20041102
APPLICATION INFO.:	US 2003-668198	A1	20030924 (10)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 2001-807842, filed on 9 Jul 2001, PENDING A 371 of International Ser. No. WO 1999-JP5769, filed on 19 Oct 1999, UNKNOWN		

	NUMBER	DATE
PRIORITY INFORMATION:	JP 1998-297228	19981019
	JP 1998-297231	19981019
	JP 1998-297232	19981019
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	WENDEROTH, LIND & PONACK, L.L.P., 2033 K STREET N. W., SUITE 800, WASHINGTON, DC, 20006-1021	
NUMBER OF CLAIMS:	31	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	5 Drawing Page(s)	
LINE COUNT:	1938	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A polypropylene/ethylene block copolymer, which has a poly(ethylene-co-propylene) segment content of 5 to 100 weight %, excluding 100 weight %, and a total ethylene content of 2 to 95 weight %. (a) The block polymer comprises polypropylene segments and poly(ethylene-co-propylene) segments chemically bonded thereto, and (b) the polypropylene segments and the poly(ethylene-co-propylene) segments have been synthesized in the presence of an olefin polymerization catalyst comprising an organometallic compound and a solid catalyst component comprising either titanium and a halogen, or titanium, magnesium, and a halogen. The block copolymer has a weight-average molecular weight of 100,000 or higher, is suitable for producing general-purpose molded articles, and has an excellent balance among mechanical properties, impact resistance, thermal properties, transparency, moldability, and other properties.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

S/N 10/551,682

L9 ANSWER 41 OF 76 USPATFULL on STN

ACCESSION NUMBER: 2004:13564 USPATFULL

TITLE: Polypropylene resin composition and heat-shrinkable film obtained from the same

INVENTOR(S): Obata, Yoichi, Sodegaura-shi, JAPAN

Ebara, Takeshi, Chiba-shi, JAPAN

PATENT ASSIGNEE(S): SUMITOMO CHEMICAL COMPANY, LIMITED (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004010087	A1	20040115
APPLICATION INFO.:	US 2003-429854	A1	20030506 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	JP 2002-133801	20020509
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	SUGHRUE MION, PLLC, 2100 Pennsylvania Avenue, NW, Washington, DC, 20037-3213	
NUMBER OF CLAIMS:	4	
EXEMPLARY CLAIM:	1	
LINE COUNT:	1224	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Disclosed is a polypropylene resin composition containing from 20 to 99.99 parts by weight of a propylene-based polymer (A) having a die swell ratio of less than 1.7 and a melting point defined as a peak temperature of a peak with a maximum intensity in a melting curve measured by DSC of from 125 to 139° C., and from 0.01 to 80 parts by weight of a propylene-based polymer (B) having a die swell ratio of not less than 1.8. This resin composition is suitable as a raw material of a heat-shrinkable film superior in rigidity, heat shrinkage and weld-cut sealability. A heat-shrinkable film obtainable from the resin composition is also disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 42 OF 76 USPATFULL on STN

ACCESSION NUMBER: 2003:289258 USPATFULL

TITLE: Isotactic propylene copolymers, their preparation and use

INVENTOR(S): Stevens, James C., Richmond, TX, UNITED STATES

Vanderlende, Daniel D., Sugarland, TX, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003204017	A1	20031030
	US 6960635	B2	20051101
APPLICATION INFO.:	US 2002-139786	A1	20020505 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-338881P	20011106 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	WHYTE HIRSCHBOECK DUDEK S.C., 111 E. WISCONSIN AVE, SUITE 2100, MILWAUKEE, WI, 53202	
NUMBER OF CLAIMS:	96	
EXEMPLARY CLAIM:	1	

S/N 10/551,682

NUMBER OF DRAWINGS: 30 Drawing Page(s)

LINE COUNT: 5231

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Unique copolymers comprising propylene, ethylene and/or one or more unsaturated comonomers are characterized as having: at least one, preferably more than one, of the following properties: (i) ¹³C NMR peaks corresponding to a regio-error at about 14.6 and about 15.7 ppm, the peaks of about equal intensity, (ii) a B-value greater than about 1.4 when the comonomer content of the copolymer is at least about 3 wt %, (iii) a skewness index, S_{ix}, greater than about -1.20, (iv) a DSC curve with a T_{me} that remains essentially the same and a T_{max} that decreases as the amount of comonomer in the copolymer is increased, and (v) an X-ray diffraction pattern that reports more gamma-form crystals than a comparable copolymer prepared with a Ziegler-Natta catalyst. These polypropylene polymers are made using a nonmetallocene, metal-centered, heteroaryl ligand catalyst. These polymers can be blended with other polymers, and are useful in the manufacture of films, sheets, foams, fibers and molded articles.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 43 OF 76 USPATFULL on STN

ACCESSION NUMBER: 2003:277273 USPATFULL

TITLE: Crystallization of polypropylene using a semi-crystalline, branched or coupled nucleating agent

INVENTOR(S): Stevens, James C., Richmond, TX, UNITED STATES
Vanderlende, Daniel D., Sugarland, TX, UNITED STATES
Ansems, Patricia, West Columbia, TX, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003195300	A1	20031016
	US 6927256	B2	20050809
APPLICATION INFO.:	US 2002-289145	A1	20021105 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-338881P	20011106 (60)
	US 2002-378204P	20020505 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	WHYTE HIRSCHBOECK DUDEK S.C., 111 E. WISCONSIN AVE, SUITE 2100, MILWAUKEE, WI, 53202	
NUMBER OF CLAIMS:	27	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	22 Drawing Page(s)	
LINE COUNT:	3364	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method of nucleating a propylene homo- or copolymer, the method comprising contacting the propylene polymer with a semi-crystalline branched or coupled polymeric nucleating agent under nucleation conditions. In one embodiment, the propylene homopolymer is characterized as having ¹³C NMR peaks corresponding to a regio-error at about 14.6 and about 15.7 ppm, the peaks of about equal intensity. In another embodiment, the copolymer is characterized as comprising at least about 60 weight percent (wt %) of units derived from propylene, and as having at least one of the following properties: (i) ¹³C NMR peaks corresponding to a regio-error at about 14.6 and about 15.7 ppm, the peaks of about equal intensity, (ii) a B-value greater than about 1.4 when the comonomer content, i.e., the units

derived from ethylene and/or the unsaturated comonomer(s), of the copolymer is at least about 3 wt %, (iii) a skewness index, $S_{\text{sub.ix}}$, greater than about -1.20, (iv) a DSC curve with a $T_{\text{sub.me}}$ that remains essentially the same and a $T_{\text{sub.max}}$ that decreases as the amount of comonomer, i.e., the units derived from ethylene and/or the unsaturated comonomer(s), in the copolymer is increased, and (v) an X-ray diffraction pattern that reports more gamma-form crystals than a comparable copolymer prepared with a Ziegler-Natta (Z-N) catalyst.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 44 OF 76 USPATFULL on STN

ACCESSION NUMBER: 2003:277272 USPATFULL

TITLE: Impact resistant polymer blends of crystalline polypropylene and partially crystalline, low molecular weight impact modifiers

INVENTOR(S): Stevens, James C., Richmond, TX, UNITED STATES
Vanderlende, Daniel D., Sugarland, TX, UNITED STATES
Ansems, Patricia, West Columbia, TX, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003195299	A1	20031016
	US 6943215	B2	20050913
APPLICATION INFO.:	US 2002-289122	A1	20021105 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-338881P	20011106 (60)
	US 2002-378203P	20020505 (60)

DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: WHYTE HIRSCHBOECK DUDEK S.C., 111 E. WISCONSIN AVE, SUITE 2100, MILWAUKEE, WI, 53202

NUMBER OF CLAIMS: 25

EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 20 Drawing Page(s)

LINE COUNT: 3324

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Polymer blends that exhibit good impact resistance comprise a crystalline polypropylene matrix and a partly crystalline copolymer impact modifier with a molecular weight lower than that of the matrix polymer. The matrix polymer can comprise any crystalline propylene homo- or copolymer. The impact modifying copolymers are characterized as comprising at least about 60 weight percent (wt %) of units derived from propylene and, in certain embodiments, as having at least one, preferably two or more, of the following properties: (i) $^{\text{sup.13C}}$ NMR peaks corresponding to a regio-error at about 14.6 and about 15.7 ppm, the peaks of about equal intensity, (ii) a B-value greater than about 1.4 when the comonomer content of the copolymer is at least about 3 wt %, (iii) a skewness index, $S_{\text{sub.ix}}$, greater than about -1.20, (iv) a DSC curve with a $T_{\text{sub.me}}$ that remains essentially the same and a $T_{\text{sub.max}}$ that decreases as the amount of comonomer in the copolymer is increased, and (v) an X-ray diffraction pattern that reports more gamma-form crystals than a comparable copolymer prepared with a Ziegler-Natta (Z-N) catalyst.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 45 OF 76 USPATFULL on STN

S/N 10/551,682

ACCESSION NUMBER: 2003:276550 USPATFULL
TITLE: Films comprising isotactic propylene
copolymers
INVENTOR(S): Tau, Li-Min, Lake Jackson, TX, UNITED STATES
Chum, Pak-Wing S., Lake Jackson, TX, UNITED STATES
Karande, Seema, Pearland, TX, UNITED STATES
Bosnyak, Clive, Missouri City, TX, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003194575	A1	20031016
	US 7041765	B2	20060509
APPLICATION INFO.:	US 2002-289168	A1	20021105 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-338881P	20011106 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	WHYTE HIRSCHBOECK DUDEK S.C., 111 E. WISCONSIN AVE, SUITE 2100, MILWAUKEE, WI, 53202	
NUMBER OF CLAIMS:	29	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	34 Drawing Page(s)	
LINE COUNT:	3761	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Films with excellent machine direction (MD) tear properties comprise at least one layer made from a polymer comprising:

(A) at least 50 weight percent (wt %) propylene; and

(B) at least 5 wt % ethylene and/or one or more unsaturated comonomers.

Representative of component (B) unsaturated comonomers are the C.sub.4-20 α -olefins, C.sub.4-20 dienes, styrenic compounds, and the like. Preferably, the film has at least one of a (i) haze value of less than about 10, (ii) 45 degree gloss of greater than about 65, and (iii) dart value of greater than about 100 g/mil. In one preferred embodiment, the layer comprises a copolymer characterized as having at least one of the following properties: (i) ¹³C NMR peaks corresponding to a regio-error at about 14.6 and about 15.7 ppm, the peaks of about equal intensity, (ii) a B-value greater than about 1.4 when the comonomer content, i.e., the units derived from ethylene and/or the unsaturated comonomer(s), of the copolymer is at least about 3 wt %, (iii) a skewness index, S.sub.ix, greater than about -1.20, (iv) a DSC curve with a T.sub.me that remains essentially the same and a T.sub.max that decreases as the amount of comonomer, i.e., the units derived from ethylene and/or the unsaturated comonomer(s), in the copolymer is increased, and (v) an X-ray diffraction pattern that reports more gamma-form crystals than a comparable copolymer prepared with a Ziegler-Natta (Z-N) catalyst.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 46 OF 76 USPATFULL on STN
ACCESSION NUMBER: 2003:251822 USPATFULL
TITLE: Isotactic propylene copolymer
fibers, their preparation and use
INVENTOR(S): Stevens, James C., Richmond, TX, UNITED STATES
Vanderlende, Daniel D., Sugarland, TX, UNITED STATES

Chang, Andy C., Lake Jackson, TX, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003176611	A1	20030918
	US 6906160	B2	20050614
APPLICATION INFO.:	US 2002-289138	A1	20021105 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-338881P	20011106 (60)
	US 2002-380148P	20020505 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	WHYTE HIRSCHBOECK DUDEK S.C., 111 E. WISCONSIN AVE, SUITE 2100, MILWAUKEE, WI, 53202	
NUMBER OF CLAIMS:	36	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	25 Drawing Page(s)	
LINE COUNT:	3676	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Fibers comprising a propylene homopolymer or a copolymer of propylene and at least one of ethylene and one or more unsaturated comonomers exhibit desirable properties. The homopolymers are characterized as having ¹³C NMR peaks corresponding to a regio-error at about 14.6 and about 15.7 ppm, the peaks of about equal intensity. The copolymers are characterized as (A) comprising at least about 60 weight percent (wt %) of units derived from propylene, and (B) having at least one of the following properties: (i) ¹³C NMR peaks corresponding to a regio-error at about 14.6 and about 15.7 ppm, the peaks of about equal intensity, (ii) a B-value greater than about 1.4 when the comonomer content of the copolymer is at least about 3 wt %, (iii) a skewness index, S_{sk}, greater than about -1.20, (iv) a DSC curve with a T_{sub} that remains essentially the same and a T_{max} that decreases as the amount of comonomer in the copolymer is increased, and (v) an X-ray diffraction pattern that reports more gamma-form crystals than a comparable copolymer prepared with a Ziegler-Natta (Z-N) catalyst.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 47 OF 76 USPATFULL on STN

ACCESSION NUMBER: 2003:214556 USPATFULL

TITLE: Transition metal compound, ligand system, catalyst system and the use of the latter for polymerisation and copolymerisation of olefins

INVENTOR(S): Schottek, Jorg, Frankfurt, GERMANY, FEDERAL REPUBLIC OF
Oberhoff, Markus, Speyer, GERMANY, FEDERAL REPUBLIC OF
Bingel, Carsten, Krißtel, GERMANY, FEDERAL REPUBLIC OF
Fischer, David, Breunigweiler, GERMANY, FEDERAL
REPUBLIC OF
Weiss, Horst, Neuhofen, GERMANY, FEDERAL REPUBLIC OF
Winter, Andreas, Naulainingen, GERMANY, FEDERAL
REPUBLIC OF
Fraaije, Volker, Frankfurt, GERMANY, FEDERAL REPUBLIC
OF
Maier, Ralph-Dieter, Hoargertshausen, GERMANY, FEDERAL
REPUBLIC OF
Bidell, Wolfgang, Mannheim, GERMANY, FEDERAL REPUBLIC
OF

S/N 10/551,682

Paczkowski, Nicola, Kemper Grove, OH, UNITED STATES
Suhm, Jurgen, Worms-Weinsheim, GERMANY, FEDERAL
REPUBLIC OF
Kratzer, Roland, Hofheim, GERMANY, FEDERAL REPUBLIC OF

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003149199	A1	20030807
	US 7342078	B2	20080311
APPLICATION INFO.:	US 2002-168952	A1	20020624 (10)
	WO 2000-EP12642		20001213

	NUMBER	DATE
PRIORITY INFORMATION:	DE 1999-19962905	19991223
	DE 2000-10044983	20000911
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	Keil & Weinkauff, 1101 Connecticut Avenue NW, Washington, DC, 20036	
NUMBER OF CLAIMS:	28	
EXEMPLARY CLAIM:	1	
LINE COUNT:	3757	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A process for the polymerization of olefins, in particular a process for the copolymerization of propylene with further olefins, is carried out in the presence of highly active catalyst systems comprising specifically selected metallocenes, in particular ones which bear different substituents in position 2 and position 4 on an indenyl ligand. Novel polypropylene copolymers can be obtained by this process.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 48 OF 76 USPATFULL on STN
ACCESSION NUMBER: 2003:207057 USPATFULL
TITLE: Film
INVENTOR(S): Seta, Yasushi, Kanagawa, JAPAN
Endoh, Masahiko, Chiba, JAPAN

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003143415	A1	20030731
	US 6723446	B2	20040420
APPLICATION INFO.:	US 2002-258608	A1	20021105 (10)
	WO 2001-JP4269		20010522

	NUMBER	DATE
PRIORITY INFORMATION:	JP 2000-151446	20000523
	JP 2000-155798	20000526
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C., 1940 DUKE STREET, ALEXANDRIA, VA, 22314	
NUMBER OF CLAIMS:	12	
EXEMPLARY CLAIM:	1	
LINE COUNT:	1293	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides a wrap film or shrink film formed from a resin composition containing [I] a propylene polymer in an amount of 1

S/N 10/551,682

to 99 mass %, and [III] an olefin-based polymer in an amount of 99 to 1 mass %, wherein [I] the propylene polymer satisfies the following requirements of: (1) a meso pentad fraction (mmmm) is 0.2 to 0.6, and (2) a racemic pentad fraction (rrrr) and (1-mmmm) satisfy the following relation: $[rrrr/(1-mmmm)] \leq 0.1$. The wrap film or shrink film exhibits excellent characteristics, and does not generate a toxic gas derived from chlorine, such as hydrogen chloride gas or dioxin, when being incinerated.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 49 OF 76 USPATFULL on STN

ACCESSION NUMBER: 2002:330392 USPATFULL

TITLE: Flame-retardant polymer composition comprising polypropylene and an ethylene copolymer having high structural uniformity

INVENTOR(S): Castellani, Luca, Corsico, ITALY
Grizante Redondo, Eduardo, Sao Paulo, BRAZIL
Zaopo, Antonio, Milano, ITALY
Albizzati, Enrico, Lesa, ITALY

PATENT ASSIGNEE(S): PIRELLI CAVI SISTEMI S.p.A. (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002188078	A1	20021212
	US 6756447	B2	20040629
APPLICATION INFO.:	US 2002-95704	A1	20020313 (10)
RELATED APPLN. INFO.:	Division of Ser. No. US 2000-488829, filed on 21 Jan 2000, PENDING Continuation-in-part of Ser. No. US 1998-121558, filed on 23 Jul 1998, GRANTED, Pat. No. US 6255399		

	NUMBER	DATE
PRIORITY INFORMATION:	IT 1997-MI1739	19970723
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	FINNEGAN, HENDERSON, FARABOW, GARRETT &, DUNNER LLP, 1300 I STREET, NW, WASHINGTON, DC, 20005	
NUMBER OF CLAIMS:	48	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	3 Drawing Page(s)	
LINE COUNT:	745	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A cable, in particular for power transmission, for telecommunications or for data transmission, or also combined power/telecommunications cables, wherein at least one coating layer consists of a recyclable material which is halogen-free and has superior mechanical, electrical, and flame-retardant properties. This material consists of a polymer mixture comprising: (a) a crystalline propylene homopolymer or copolymer; and (b) a copolymer of ethylene with at least one alpha-olefin having from 4 to 12 carbon atoms, and optionally with a diene; the said copolymer (b) being characterized by a density of between 0.90 and 0.86 g/cm.^{sup.3} and by a Composition Distribution Index, defined as the weight percentage of copolymer molecules having an alpha-olefin content within 50% of the average total molar content of alpha-olefin, of greater than 45%. This material may also include a flame-retardant inorganic filler.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

S/N 10/551,682

L9 ANSWER 50 OF 76 USPATFULL on STN
ACCESSION NUMBER: 2002:221132 USPATFULL
TITLE: Air bag housing cover
INVENTOR(S): Gakuji, Shin, Yokkaichi-shi, JAPAN
Itou, Motoko, Yokkaichi-shi, JAPAN

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002119268	A1	20020829
APPLICATION INFO.:	US 2001-22490	A1	20011218 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	JP 2000-392421	20001225
	JP 2001-92424	20010328
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	DBRC, IPPG OF EDWARDS & ANGELL, LLP, P.O. BOX 9169, BOSTON, MA, 02209	
NUMBER OF CLAIMS:	20	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	1 Drawing Page(s)	
LINE COUNT:	1218	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to an air bag housing cover comprising (A) an olefin-based thermoplastic elastomer comprising (A1) a propylene homopolymer having an isotactic index of not less than 90%, and (A2) a copolymer of propylene and a C.sub.2 to C.sub.8 α -olefin other than propylene, said propylene homopolymer (A1) and said copolymer (A2) being present in amounts of 30 to 60% by weight and 70 to 40% by weight, respectively, based on a total amount of the components (A1) and (A2), and said copolymer having propylene unit and ethylene unit as essential constituting units,

said olefin-based thermoplastic elastomer (A) being obtained by producing the component (A2) by polymerization subsequent to the production of the component (A1) by polymerization, and having a 0° C. eluate content of 30 to 60% by weight based on a total eluate content as measured at a temperature between 0° C. and 140° C. by a temperature rising elution fractionation using o-dichlorobenzene as a solvent.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 51 OF 76 USPATFULL on STN
ACCESSION NUMBER: 2002:152726 USPATFULL
TITLE: Cables with a halogen-free recyclable coating
comprising polypropylene and an ethylene copolymer
having high structural uniformity
INVENTOR(S): Castellani, Luca, Corsico, ITALY
Grizante Redondo, Eduardo, Sao Paulo, BRAZIL
Zaopo, Antonio, Milan, ITALY
Albizzati, Enrico, Lesa, ITALY
PATENT ASSIGNEE(S): Pirelli Cavi e Sistemi S.p.A., Milan, ITALY (non-U.S.
corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6410651	B1	20020625
APPLICATION INFO.:	US 2000-488829		20000121 (9)

S/N 10/551,682

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1998-121558, filed on 23 Jul 1998, now patented, Pat. No. US 6255399

	NUMBER	DATE
PRIORITY INFORMATION:	IT 1997-MI1739	19970723
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	GRANTED	
PRIMARY EXAMINER:	Henderson, Christopher	
LEGAL REPRESENTATIVE:	Finnegan, Henderson, Farabow, Garrett & Dunner, L.L.P.	
NUMBER OF CLAIMS:	33	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	4 Drawing Figure(s); 3 Drawing Page(s)	
LINE COUNT:	703	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A cable, in particular for power transmission, for telecommunications or for data transmission, or also combined power/telecommunications cables, wherein at least one coating layer consists of a recyclable material which is halogen-free and has superior mechanical, electrical, and flame-retardant properties. This material consists of a polymer mixture comprising: (a) a crystalline propylene homopolymer or copolymer; and (b) a copolymer of ethylene with at least one alpha-olefin having from 4 to 12 carbon atoms, and optionally with a diene; the said copolymer (b) being characterized by a density of between 0.90 and 0.86 g/cm.³ and by a Composition Distribution Index, defined as the weight percentage of copolymer molecules having an alpha-olefin content within 50% of the average total molar content of alpha-olefin, of greater than 45%. This material may also include a flame-retardant inorganic filler.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 52 OF 76 USPATFULL on STN
ACCESSION NUMBER: 2001:185406 USPATFULL
TITLE: Polypropylene block-copolymer resin and process for producing it
INVENTOR(S): Takaoka, Tohru, Ichihara, Japan
Hashimoto, Mikio, Sakai, Japan
Momoda, Nobuyosi, Wakayama, Japan
PATENT ASSIGNEE(S): Grand Polymer Co. Ltd., Tokyo, Japan (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6306973	B1	20011023
APPLICATION INFO.:	US 2000-497227		20000203 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	JP 1999-27133	19990204
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	GRANTED	
PRIMARY EXAMINER:	Seidleck, James J.	
ASSISTANT EXAMINER:	Asinovsky, Olga	
NUMBER OF CLAIMS:	26	
EXEMPLARY CLAIM:	1	
LINE COUNT:	2286	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Polypropylene block-copolymer resin exhibiting high melt tension and improved moldability with balanced stiffness and impact resistance may be molded at high speed into large-sized articles, including, stretched

S/N 10/551,682

films, with good appearance and resistance to deformation. The block copolymer includes a higher molecular weight polypropylene segment, a lower molecular weight polypropylene segment and an ethylene α -olefin copolymer segment. When subjected to dissolution fractionation in paraxylene, a large proportion is insoluble at 23° C. but soluble at 135° C., and a smaller portion is soluble at 23° C. The block copolymer has a melt flow rate of 0.01 to 5 g/10 min at 230 C. (2.16 kg) and a molecular weight distribution Mw/Mn of 6-20 and Mz/Mw of at least 3.5. A continuous multistage polymerization may be used to form the block copolymer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 53 OF 76 USPATFULL on STN

ACCESSION NUMBER: 2001:152618 USPATFULL

TITLE: Propylene random copolymer, propylene resin composition, film of these, and multilayered propylene resin laminate

INVENTOR(S): Seta, Yasushi, Ichihara, Japan

Minami, Yutaka, Ichiharashi, Japan

PATENT ASSIGNEE(S): Idemitsu Petrochemical Co., Ltd., Tokyo, Japan
(non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6287705	B1	20010911
	WO 2000012573		20000309
APPLICATION INFO.:	US 2000-529418		20000501 (9)
	WO 1999-JP4657		19990830
			20000501 PCT 371 date
			20000501 PCT 102(e) date

	NUMBER	DATE
PRIORITY INFORMATION:	JP 1998-246850	19980901
	JP 1998-335513	19981126
	JP 1999-129138	19990510
	JP 1999-162905	19990609
	JP 1999-173771	19990621

DOCUMENT TYPE: Utility

FILE SEGMENT: GRANTED

PRIMARY EXAMINER: Thibodeau, Paul

ASSISTANT EXAMINER: Jackson, Monique

LEGAL REPRESENTATIVE: Oblon, Spivak, McClelland, Maier & Neustadt, P.C.

NUMBER OF CLAIMS: 32

EXEMPLARY CLAIM: 1

LINE COUNT: 3783

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention provides (1) a propylene-ethylene random copolymer having specific properties, (2) a resin composition comprising a propylene-ethylene random copolymer with specific properties, and a nucleating agent, (3) a resin composition comprising a propylene-ethylene random copolymer with specific properties, and a propylene-based polymer; and their films, and multi-layered, propylene-based laminates of which the outermost layer is made of a specific propylene-based polymer. The films and the laminates exhibit excellent heat-sealability, and have good slip characteristics and good anti-blocking characteristics.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

S/N 10/551,682

L9 ANSWER 54 OF 76 USPATFULL on STN

ACCESSION NUMBER: 2001:125689 USPATFULL

TITLE: Propylene-based random copolymers and propylene-based resin compositions, films thereof and propylene-based resin laminates

INVENTOR(S): Seta, Yasushi, Ichihara, Japan

Minami, Yutaka, Ichihara, Japan

PATENT ASSIGNEE(S): Idemitsu Petrochemical Co., Ltd., Tokyo, Japan
(non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6270911	B1	20010807
	WO 2000020473		20000413
APPLICATION INFO.:	US 2000-555515		20000606 (9)
	WO 1999-JP5478		19991005
			20000606 PCT 371 date
			20000606 PCT 102(e) date

	NUMBER	DATE
PRIORITY INFORMATION:	JP 1998-284084	19981006
	JP 1998-335513	19981126
	JP 1999-158893	19990607
	JP 1999-162905	19990609
	JP 1999-173771	19990621
	JP 1999-236123	19990823

DOCUMENT TYPE: Utility

FILE SEGMENT: GRANTED

PRIMARY EXAMINER: Thibodeau, Paul

ASSISTANT EXAMINER: Jackson, Monique R

LEGAL REPRESENTATIVE: Oblon, Spivak, McClelland, Maier & Neustadt, P.C.

NUMBER OF CLAIMS: 38

EXEMPLARY CLAIM: 1

LINE COUNT: 4752

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention provides (1) a propylene-ethylene-1-butene random copolymer having specific properties, (2) a resin composition comprising a propylene-ethylene-1-butene random copolymer with specific properties, and a nucleating agent, (3) a resin composition comprising a propylene-ethylene-1-butene random copolymer with specific properties, and a propylene-based polymer; and their films, and multi-layered, propylene-based laminates of which the outermost layer is made of a specific propylene-based polymer. The films and the laminates exhibit excellent heat-sealability, and have good slip characteristics and good anti-blocking characteristics.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 55 OF 76 USPATFULL on STN

ACCESSION NUMBER: 2001:102909 USPATFULL

TITLE: Cables with a halogen-free recyclable coating comprising polypropylene and an ethylene copolymer having high structural uniformity

INVENTOR(S): Castellani, Luca, Corsico, Italy

Grizante, Eduardo Redondo, Monza, Italy

Zaopo, Antonio, Milan, Italy

Albizzati, Enrico, Arona, Italy

PATENT ASSIGNEE(S): Pirelli Cavi e Sistemi S.p.A., Milan, Italy (non-U.S.)

corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6255399	B1	20010703
APPLICATION INFO.:	US 1998-121558		19980723 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	IT 1997-MI1739	19970723
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	GRANTED	
PRIMARY EXAMINER:	Lipman, Bernard	
LEGAL REPRESENTATIVE:	Finnegan, Henderson, Farabow, Garrett & Dunner, L.L.P.	
NUMBER OF CLAIMS:	20	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	1 Drawing Figure(s); 1 Drawing Page(s)	
LINE COUNT:	563	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A cable, in particular for power transmission, for telecommunications or for data transmission, or also combined power/telecommunications cables, wherein at least one coating layer consists of a recyclable material which is halogen-free and has superior mechanical and electrical properties. This material consists of a polymer mixture comprising: (a) a crystalline propylene homopolymer or copolymer; and (b) a copolymer of ethylene with at least one alpha-olefin having from 4 to 12 carbon atoms, and optionally with a diene; the said copolymer (b) being characterized by a density of between 0.90 and 0.86 g/cm.^{sup.3} and by a Composition Distribution Index, defined as the weight percentage of copolymer molecules having an alpha-olefin content within 50% of the average total molar content of alpha-olefin, of greater than 45%.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 56 OF 76 USPAT2 on STN

ACCESSION NUMBER: 2007:140622 USPAT2
 TITLE: Isotactic propylene copolymer
 fibers, their preparation and use
 INVENTOR(S): Stevens, James C., Richmond, TX, UNITED STATES
 Vanderlende, Daniel D., Sugar Land, TX, UNITED STATES
 Ethiopia, Samuel, Rosharon, TX, UNITED STATES
 PATENT ASSIGNEE(S): Dow Global Technologies Inc., Midland, MI, UNITED STATES (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 7344775	B2	20080318
APPLICATION INFO.:	US 2007-669342		20070131 (11)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 2005-148895, filed on 9 Jun 2005, Pat. No. US 7199203 Division of Ser. No. US 2002-289138, filed on 5 Nov 2002, Pat. No. US 6906160		

	NUMBER	DATE
PRIORITY INFORMATION:	US 2002-380148P	20020505 (60)
	US 2001-338881P	20011106 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	GRANTED	
PRIMARY EXAMINER:	Rabago, Roberto	
LEGAL REPRESENTATIVE:	Whyte Hirschboeck Dudek SC	

S/N 10/551,682

NUMBER OF CLAIMS: 15
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 35 Drawing Figure(s); 25 Drawing Page(s)
LINE COUNT: 3596

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Fibers comprising a propylene homopolymer or a copolymer of propylene and at least one of ethylene and one or more unsaturated comonomers exhibit desirable properties. The homopolymers are characterized as having ¹³C NMR peaks corresponding to a regio-error at about 14.6 and about 15.7 ppm, the peaks of about equal intensity. The copolymers are characterized as (A) comprising at least about 60 weight percent (wt %) of units derived from propylene, and (B) having at least one of the following properties: (i) ¹³C NMR peaks corresponding to a regio-error at about 14.6 and about 15.7 ppm, the peaks of about equal intensity, (ii) a B-value greater than about 1.4 when the comonomer content of the copolymer is at least about 3 wt %, (iii) a skewness index, S.sub.ix, greater than about -1.20, (iv) a DSC curve with a T.sub.me that remains essentially the same and a T.sub.max that decreases as the amount of comonomer in the copolymer is increased, and (v) an X-ray diffraction pattern that reports more gamma-form crystals than a comparable copolymer prepared with a Ziegler-Natta (Z-N) catalyst.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 57 OF 76 USPAT2 on STN

ACCESSION NUMBER: 2006:167984 USPAT2
TITLE: Impact resistance polymer blends of crystalline polypropylene and partially crystalline, low molecular weight impact modifiers
INVENTOR(S): Stevens, James C., Richmond, TX, UNITED STATES
Vanderlende, Daniel D., Sugarland, TX, UNITED STATES
Ansems, Patricia, West Columbia, TX, UNITED STATES
PATENT ASSIGNEE(S): Dow Global Technologies Inc., Midland, MI, UNITED STATES (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 7250471	B2	20070731
APPLICATION INFO.:	US 2006-359091		20060222 (11)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 2004-884420, filed on 2 Jul 2004, Pat. No. US 7109269 Division of Ser. No. US 2002-289122, filed on 5 Nov 2002, Pat. No. US 6943215		

	NUMBER	DATE
PRIORITY INFORMATION:	US 2002-378203P	20020505 (60)
	US 2001-338881P	20011106 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Nutter, Nathan M.
LEGAL REPRESENTATIVE: Whyte Hirschboeck Dudek SC
NUMBER OF CLAIMS: 18
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 29 Drawing Figure(s); 20 Drawing Page(s)
LINE COUNT: 3274

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Polymer blends that exhibit good impact resistance comprise a crystalline polypropylene matrix and a partly crystalline copolymer impact modifier with a molecular weight lower than that of the matrix

polymer. The matrix polymer can comprise any crystalline propylene homo- or copolymer. The impact modifying copolymers are characterized as comprising at least about 60 weight percent (wt %) of units derived from propylene and, in certain embodiments, as having at least one, preferably two or more, of the following properties: (i) ¹³C NMR peaks corresponding to a regio-error at about 14.6 and about 15.7 ppm, the peaks of about equal intensity, (ii) a B-value greater than about 1.4 when the comonomer content of the copolymer is at least about 3 wt %, (iii) a skewness index, S_{ix}, greater than about -1.20, (iv) a DSC curve with a T_{me} that remains essentially the same and a T_{max} that decreases as the amount of comonomer in the copolymer is increased, and (v) an X-ray diffraction pattern that reports more gamma-form crystals than a comparable copolymer prepared with a Ziegler-Natta (Z-N) catalyst.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 58 OF 76 USPAT2 on STN

ACCESSION NUMBER: 2006:167981 USPAT2
 TITLE: Crystallization of polypropylene using a semi-crystalline, branched or coupled nucleating agent
 INVENTOR(S): Stevens, James C., Richmond, TX, UNITED STATES
 Vanderlende, Daniel D., Sugarland, TX, UNITED STATES
 Ansems, Patricia, West Columbia, TX, UNITED STATES
 PATENT ASSIGNEE(S): Dow Global Technologies Inc., Midland, MI, UNITED STATES (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 7250470	B2	20070731
APPLICATION INFO.:	US 2006-359020		20060222 (11)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 2004-914800, filed on 10 Aug 2004, Pat. No. US 7060754 Division of Ser. No. US 2002-289145, filed on 5 Nov 2002, Pat. No. US 6927256		

	NUMBER	DATE
PRIORITY INFORMATION:	US 2002-378204P	20020505 (60)
	US 2001-338881P	20011106 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	GRANTED	
PRIMARY EXAMINER:	Nutter, Nathan M.	
LEGAL REPRESENTATIVE:	Whyte Hirschboeck Dudek SC	
NUMBER OF CLAIMS:	5	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	33 Drawing Figure(s); 22 Drawing Page(s)	
LINE COUNT:	3227	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method of nucleating a propylene homo- or copolymer, the method comprising contacting the propylene polymer with a semi-crystalline branched or coupled polymeric nucleating agent under nucleation conditions. In one embodiment, the propylene homopolymer is characterized as having ¹³C NMR peaks corresponding to a regio-error at about 14.6 and about 15.7 ppm, the peaks of about equal intensity. In another embodiment, the copolymer is characterized as comprising at least about 60 weight percent (wt %) of units derived from propylene, and as having at least one of the following properties: (i) ¹³C NMR peaks corresponding to a regio-error at about 14.6 and about 15.7 ppm, the peaks of about equal intensity, (ii) a B-value greater than about 1.4 when the comonomer content, i.e., the units

S/N 10/551,682

derived from ethylene and/or the unsaturated comonomer(s), of the copolymer is at least about 3 wt %, (iii) a skewness index, S.sub.ix, greater than about -1.20, (iv) a DSC curve with a T.sub.me that remains essentially the same and a T.sub.max that decreases as the amount of comonomer, i.e., the units derived from ethylene and/or the unsaturated comonomer(s), in the copolymer is increased, and (v) an X-ray diffraction pattern that reports more gamma-form crystals than a comparable copolymer prepared with a Ziegler-Natta (Z-N) catalyst.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 59 OF 76 USPAT2 on STN

ACCESSION NUMBER: 2005:281731 USPAT2

TITLE: Isotactic propylene copolymer
fibers, their preparation and use

INVENTOR(S): Stevens, James C., Richmond, TX, UNITED STATES
Vanderlende, Daniel D., Sugar Land, TX, UNITED STATES
Ethiopia, Samuel, Rosharon, TX, UNITED STATES

PATENT ASSIGNEE(S): Dow Global Technologies, Inc., Midland, MI, UNITED STATES (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 7199203	B2	20070403
APPLICATION INFO.:	US 2005-148895		20050609 (11)
RELATED APPLN. INFO.:	Division of Ser. No. US 2002-289138, filed on 5 Nov 2002, Pat. No. US 6906160		

	NUMBER	DATE
PRIORITY INFORMATION:	US 2002-380148P	20020505 (60)
	US 2001-338881P	20011106 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	GRANTED	
PRIMARY EXAMINER:	Rabago, Roberto	
LEGAL REPRESENTATIVE:	Whyte Hirschboeck Dudek SC	
NUMBER OF CLAIMS:	12	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	35 Drawing Figure(s); 25 Drawing Page(s)	
LINE COUNT:	3566	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Fibers comprising a propylene homopolymer or a copolymer of propylene and at least one of ethylene and one or more unsaturated comonomers exhibit desirable properties. The homopolymers are characterized as having .sup.13C NMR peaks corresponding to a regio-error at about 14.6 and about 15.7 ppm, the peaks of about equal intensity. The copolymers are characterized as (A) comprising at least about 60 weight percent (wt %) of units derived from propylene, and (B) having at least one of the following properties: (i) .sup.13C NMR peaks corresponding to a regio-error at about 14.6 and about 15.7 ppm, the peaks of about equal intensity, (ii) a B-value greater than about 1.4 when the comonomer content of the copolymer is at least about 3 wt %, (iii) a skewness index, S.sub.ix, greater than about -1.20, (iv) a DSC curve with a T.sub.me that remains essentially the same and a T.sub.max that decreases as the amount of comonomer in the copolymer is increased, and (v) an X-ray diffraction pattern that reports more gamma-form crystals than a comparable copolymer prepared with a Ziegler-Natta (Z-N) catalyst.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

S/N 10/551,682

L9 ANSWER 60 OF 76 USPAT2 on STN

ACCESSION NUMBER: 2005:280691 USPAT2

TITLE: Propylene-based copolymers, a method of making the fibers and articles made from the fibers

INVENTOR(S): Chang, Andy C., Houston, TX, UNITED STATES
Peng, Hong, Lake Jackson, TX, UNITED STATES
Van Dun, Jozef J. I., Bellaire, TX, UNITED STATES
Pepper, Randy E., Lake Jackson, TX, UNITED STATES
Knickerbocker, Edward N., Lake Jackson, TX, UNITED STATES
Doufas, Antonios K., Lake Jackson, TX, UNITED STATES
Patel, Rajen M., Lake Jackson, TX, UNITED STATES
Liu, Lizhi, Lake Jackson, TX, UNITED STATES
Day, Byron P., Canton, GA, UNITED STATES
Englebert, Stephen M., Woodstock, GA, UNITED STATES
Jordan, Joy F., Marietta, GA, UNITED STATES
Richard, Renette E., Dunwoody, GA, UNITED STATES
Sanders, Christian L., Decatur, GA, UNITED STATES
Sharma, Varunesh, Atlanta, GA, UNITED STATES
PATENT ASSIGNEE(S): Dow Global Technologies Inc., Midland, MI, UNITED STATES (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 7101622	B2	20060905
APPLICATION INFO.:	US 2005-83891		20050318 (11)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2004-554664P	20040319 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	GRANTED	
PRIMARY EXAMINER:	Edwards, N.	
NUMBER OF CLAIMS:	26	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	9 Drawing Figure(s); 9 Drawing Page(s)	
LINE COUNT:	1598	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Fibers that exhibit good elasticity or extensibility and tenacity, and low modulus are prepared from propylene-based copolymers. The propylene-based copolymers comprise at least about 50 weight percent (wt %) of units derived from propylene and at least about 8 wt % of units derived from one or more comonomers other than propylene, e.g., ethylene. Particularly preferred propylene copolymers are characterized as having .sup.13C NMR peaks corresponding to a regio-error at about 14.6 and about 15.7 ppm, the peaks of about equal intensity. In one aspect of the invention, fibers are subjected to stress-induced crystallization by subjecting the fiber to tensile elongation during draw.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 61 OF 76 USPAT2 on STN

ACCESSION NUMBER: 2005:132058 USPAT2

TITLE: Isotactic propylene copolymers, their preparation and use

INVENTOR(S): Stevens, James C., Richmond, TX, UNITED STATES
Vanderlende, Daniel D., Sugarland, TX, UNITED STATES
PATENT ASSIGNEE(S): Dow Global Technologies Inc., Midland, MI, UNITED STATES

STATES (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 7238759	B2	20070703
APPLICATION INFO.:	US 2004-988964		20041115 (10)
RELATED APPLN. INFO.:	Division of Ser. No. US 2002-139786, filed on 5 May 2002, Pat. No. US 6960635		

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-338881P	20011106 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	GRANTED	
PRIMARY EXAMINER:	Choi, Ling-Sui	
LEGAL REPRESENTATIVE:	Whyte Hirschboeck Dudek SC	
NUMBER OF CLAIMS:	40	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	47 Drawing Figure(s); 30 Drawing Page(s)	
LINE COUNT:	4920	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Unique copolymers comprising propylene, ethylene and/or one or more unsaturated comonomers are characterized as having: at least one, preferably more than one, of the following properties: (i) ¹³C NMR peaks corresponding to a regio-error at about 14.6 and about 15.7 ppm, the peaks of about equal intensity, (ii) a B-value greater than about 1.4 when the comonomer content of the copolymer is at least about 3 wt %, (iii) a skewness index, S_{sub.ix}, greater than about -1.20, (iv) a DSC curve with a T_{sub.me} that remains essentially the same and a T_{sub.max} that decreases as the amount of comonomer in the copolymer is increased, and (v) an X-ray diffraction pattern that reports more gamma-form crystals than a comparable copolymer prepared with a Ziegler-Natta catalyst These polypropylene polymers are made using a nonmetallocene, metal-centered, heteroaryl ligand catalyst. These polymers can be blended with other polymers, and are useful in the manufacture of films, sheets, foams, fibers and molded articles.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 62 OF 76 USPAT2 on STN
 ACCESSION NUMBER: 2005:63758 USPAT2
 TITLE: Films comprising isotactic propylene copolymers
 INVENTOR(S): Tau, Li-Min, Lake Jackson, TX, UNITED STATES
 Chum, Pak-Wing S., Lake Jackson, TX, UNITED STATES
 Karande, Seema, Pearland, TX, UNITED STATES
 Bosnyak, Clive, Missouri City, TX, UNITED STATES
 PATENT ASSIGNEE(S): Dow Global Technologies Inc., Midland, MI, UNITED STATES (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6946535	B2	20050920
APPLICATION INFO.:	US 2004-967849		20041018 (10)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 2002-289168, filed on 5 Nov 2002, PENDING		

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-338881P	20011106 (60)

S/N 10/551,682

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Cheung, William K.
LEGAL REPRESENTATIVE: Whyte Hirschboeck Dudek SC
NUMBER OF CLAIMS: 20
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 44 Drawing Figure(s); 34 Drawing Page(s)
LINE COUNT: 3677

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Films with excellent machine direction (MD) tear properties comprise at least one layer made from a polymer comprising:

- (A) at least 50 weight percent (wt %) propylene; and
(B) at least 5 wt % ethylene and/or one or more unsaturated comonomers.
Representative of component (B) unsaturated comonomers are the C.sub.4-20 α -olefins, C.sub.4-20 dienes, styrenic compounds, and the like. Preferably, the film has at least one of a (i) haze value of less than about 10, (ii) 45 degree gloss of greater than about 65, and (iii) dart value of greater than about 100 g/mil. In one preferred embodiment, the layer comprises a copolymer characterized as having at least one of the following properties: (i) ¹³C NMR peaks corresponding to a regio-error at about 14.6 and about 15.7 ppm, the peaks of about equal intensity, (ii) a B-value greater than about 1.4 when the comonomer content, i.e., the units derived from ethylene and/or the unsaturated comonomer(s), of the copolymer is at least about 3 wt %, (iii) a skewness index, S.sub.ix, greater than about -1.20, (iv) a DSC curve with a T.sub.me that remains essentially the same and a T.sub.max that decreases as the amount of comonomer, i.e., the units derived from ethylene and/or the unsaturated comonomer(s), in the copolymer is increased, and (v) an X-ray diffraction pattern that reports more gamma-form crystals than a comparable copolymer prepared with a Ziegler-Natta (Z-N) catalyst.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 63 OF 76 USPAT2 on STN

ACCESSION NUMBER: 2005:50669 USPAT2
TITLE: Crystallization of polypropylene using a semi-crystalline, branched or coupled nucleating agent
INVENTOR(S): Stevens, James C., Richmond, TX, UNITED STATES
Vanderlende, Daniel D., Sugarland, TX, UNITED STATES
Ansems, Patricia, West Columbia, TX, UNITED STATES
PATENT ASSIGNEE(S): Dow Global Technologies Inc., Midland, MI, UNITED STATES (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 7060754	B2	20060613
APPLICATION INFO.:	US 2004-914800		20040810 (10)
RELATED APPLN. INFO.:	Division of Ser. No. US 2002-289145, filed on 5 Nov 2002, PENDING		

	NUMBER	DATE
PRIORITY INFORMATION:	US 2002-378204P	20020505 (60)
	US 2001-338881P	20011106 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Nutter, Nathan M.
LEGAL REPRESENTATIVE: Whyte Hirschboeck Dudek SC

S/N 10/551,682

NUMBER OF CLAIMS: 13
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 32 Drawing Figure(s); 22 Drawing Page(s)
LINE COUNT: 3275

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method of nucleating a propylene homo- or copolymer, the method comprising contacting the propylene polymer with a semi-crystalline branched or coupled polymeric nucleating agent under nucleation conditions. In one embodiment, the propylene homopolymer is characterized as having ¹³C NMR peaks corresponding to a regio-error at about 14.6 and about 15.7 ppm, the peaks of about equal intensity. In another embodiment, the copolymer is characterized as comprising at least about 60 weight percent (wt %) of units derived from propylene, and as having at least one of the following properties: (i) ¹³C NMR peaks corresponding to a regio-error at about 14.6 and about 15.7 ppm, the peaks of about equal intensity, (ii) a B-value greater than about 1.4 when the comonomer content, i.e., the units derived from ethylene and/or the unsaturated comonomer(s), of the copolymer is at least about 3 wt %, (iii) a skewness index, S_{ix}, greater than about -1.20, (iv) a DSC curve with a T_{me} that remains essentially the same and a T_{max} that decreases as the amount of comonomer, i.e., the units derived from ethylene and/or the unsaturated comonomer(s), in the copolymer is increased, and (v) an X-ray diffraction pattern that reports more gamma-form crystals than a comparable copolymer prepared with a Ziegler-Natta (Z-N) catalyst.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 64 OF 76 USPAT2 on STN

ACCESSION NUMBER: 2004:315407 USPAT2
TITLE: Impact resistant polymer blends of crystalline polypropylene and partially crystalline, low molecular weight impact modifiers
INVENTOR(S): Stevens, James C., Richmond, TX, UNITED STATES
Vanderlende, Daniel D., Sugarland, TX, UNITED STATES
Ansems, Patricia, West Columbia, TX, UNITED STATES
PATENT ASSIGNEE(S): Dow Global Technologies Inc., Midland, MI, UNITED STATES (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 7109269	B2	20060919
APPLICATION INFO.:	US 2004-884420		20040702 (10)
RELATED APPLN. INFO.:	Division of Ser. No. US 2002-289122, filed on 5 Nov 2002, PENDING		

	NUMBER	DATE
PRIORITY INFORMATION:	US 2002-378203P	20020505 (60)
	US 2001-338881P	20011106 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Nutter, Nathan M.
LEGAL REPRESENTATIVE: Whyte Hirschboeck Dudek SC
NUMBER OF CLAIMS: 18
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 29 Drawing Figure(s); 20 Drawing Page(s)
LINE COUNT: 3272

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Polymer blends that exhibit good impact resistance comprise a

crystalline polypropylene matrix and a partly crystalline copolymer impact modifier with a molecular weight lower than that of the matrix polymer. The matrix polymer can comprise any crystalline propylene homo- or copolymer. The impact modifying copolymers are characterized as comprising at least about 60 weight percent (wt %) of units derived from propylene and, in certain embodiments, as having at least one, preferably two or more, of the following properties: (i) ^{13}C NMR peaks corresponding to a regio-error at about 14.6 and about 15.7 ppm, the peaks of about equal intensity, (ii) a B-value greater than about 1.4 when the comonomer content of the copolymer is at least about 3 wt %, (iii) a skewness index, S_{ix} , greater than about -1.20, (iv) a DSC curve with a T_{me} that remains essentially the same and a T_{max} that decreases as the amount of comonomer in the copolymer is increased, and (v) an X-ray diffraction pattern that reports more gamma-form crystals than a comparable copolymer prepared with a Ziegler-Natta (Z-N) catalyst.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 65 OF 76 USPAT2 on STN
 ACCESSION NUMBER: 2004:108348 USPAT2
 TITLE: Blends and sealant compositions comprising isotactic propylene copolymers
 INVENTOR(S): Tau, Li-Min, Lake Jackson, TX, UNITED STATES
 Chum, Pak-Wing S., Lake Jackson, TX, UNITED STATES
 Karande, Seema, Pearland, TX, UNITED STATES
 Bosnyak, Clive, Missouri City, TX, UNITED STATES
 PATENT ASSIGNEE(S): Dow Global Technologies Inc., Midland, MI, UNITED STATES (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6919407	B2	20050719
APPLICATION INFO.:	US 2003-641978		20030815 (10)
RELATED APPLN. INFO.:	Division of Ser. No. US 2002-289168, filed on 5 Nov 2002, PENDING		

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-338881P	20011106 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	GRANTED	
PRIMARY EXAMINER:	Cheung, William K.	
LEGAL REPRESENTATIVE:	Whyte Hirschboeck Dudek SC	
NUMBER OF CLAIMS:	19	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	44 Drawing Figure(s); 34 Drawing Page(s)	
LINE COUNT:	3670	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Films with excellent machine direction (MD) tear properties comprise at least one layer made from a polymer comprising:

- (A) at least 50 weight percent (wt %) propylene; and
- (B) at least 5 wt % ethylene and/or one or more unsaturated comonomers. Representative of component (B) unsaturated comonomers are the C.sub.4-20 α -olefins, C.sub.4-20 dienes, styrenic compounds, and the like. Preferably, the film has at least one of a (i) haze value of less than about 10, (ii) 45 degree gloss of greater than about 65, and (iii) dart value of greater than about 100 g/mil. In one preferred embodiment, the layer comprises a copolymer characterized as having at

least one of the following properties: (i) ^{13}C NMR peaks corresponding to a regio-error at about 14.6 and about 15.7 ppm, the peaks of about equal intensity, (ii) a B-value greater than about 1.4 when the comonomer content, i.e., the units derived from ethylene and/or the unsaturated comonomer(s), of the copolymer is at least about 3 wt %, (iii) a skewness index, S_{ix} , greater than about -1.20, (iv) a DSC curve with a T_{me} that remains essentially the same and a T_{max} that decreases as the amount of comonomer, i.e., the units derived from ethylene and/or the unsaturated comonomer(s), in the copolymer is increased, and (v) an X-ray diffraction pattern that reports more gamma-form crystals than a comparable copolymer prepared with a Ziegler-Natta (Z-N) catalyst.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 66 OF 76 USPAT2 on STN

ACCESSION NUMBER: 2004:95502 USPAT2

TITLE: Propylene/ethylene block copolymer, blushing-resistant transparent polypropylene resin for molding, elastomer for molding, and molded article obtained therefrom

INVENTOR(S): Terano, Minoru, Daigakushukusha A-35, 1-50, Asahidai, Tatsunokuchi-machi, Nomi-gun Ishikawa 923-1211, JAPAN
Matsukawa, Tetsuya, Kanagawa, JAPAN
Satake, Hideshi, Kanagawa, JAPAN
Takahashi, Masato, Kanagawa, JAPAN

PATENT ASSIGNEE(S): Chisso Petrochemical Corporation, Tokyo, JAPAN
(non-U.S. corporation)
Japan Science and Technology Corporation, Saitama, JAPAN (non-U.S. corporation)
Terano, Minoru, Ishikawa, JAPAN (non-U.S. individual)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6812292	B2	20041102
APPLICATION INFO.:	US 2003-668198		20030924 (10)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 807842		

	NUMBER	DATE
PRIORITY INFORMATION:	JP 1998-297228	19981019
	JP 1998-297231	19981019
	JP 1998-297232	19981019
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	GRANTED	
PRIMARY EXAMINER:	Teskin, Fred	
LEGAL REPRESENTATIVE:	Wenderoth, Lind & Ponack, L.L.P.	
NUMBER OF CLAIMS:	34	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	9 Drawing Figure(s); 5 Drawing Page(s)	
LINE COUNT:	1810	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A polypropylene/ethylene block copolymer, which has a poly(ethylene-co-propylene) segment content of 5 to 100 weight %, excluding 100 weight %, and a total ethylene content of 2 to 95 weight %. (a) The block polymer comprises polypropylene segments and poly(ethylene-co-propylene) segments chemically bonded thereto, and (b) the polypropylene segments and the poly(ethylene-co-propylene) segments have been synthesized in the presence of an olefin polymerization catalyst comprising an organometallic compound and a solid catalyst component comprising either titanium and a halogen, or titanium,

S/N 10/551,682

magnesium, and a halogen. The block copolymer has a weight-average molecular weight of 100,000 or higher, is suitable for producing general-purpose molded articles, and has an excellent balance among mechanical properties, impact resistance, thermal properties, transparency, moldability, and other properties.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 67 OF 76 USPAT2 on STN
ACCESSION NUMBER: 2003:289258 USPAT2
TITLE: Isotactic propylene copolymers,
their preparation and use
INVENTOR(S): Stevens, James C., Richmond, TX, UNITED STATES
Vanderlende, Daniel D., Sugarland, TX, UNITED STATES
PATENT ASSIGNEE(S): Dow Global Technologies Inc., Midland, MI, UNITED
STATES (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6960635	B2	20051101
APPLICATION INFO.:	US 2002-139786		20020505 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-338881P	20011106 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	GRANTED	
PRIMARY EXAMINER:	Choi, Ling-Siu	
LEGAL REPRESENTATIVE:	Whyte Hirschboeck Dudek SC	
NUMBER OF CLAIMS:	29	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	39 Drawing Figure(s); 30 Drawing Page(s)	
LINE COUNT:	4710	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Unique copolymers comprising propylene, ethylene and/or one or more unsaturated comonomers are characterized as having: at least one, preferably more than one, of the following properties: (i) ¹³C NMR peaks corresponding to a regio-error at about 14.6 and about 15.7 ppm, the peaks of about equal intensity, (ii) a B-value greater than about 1.4 when the comonomer content of the copolymer is at least about 3 wt %, (iii) a skewness index, S_{ix}, greater than about -1.20, (iv) a DSC curve with a T_{me} that remains essentially the same and a T_{max} that decreases as the amount of comonomer in the copolymer is increased, and (v) an X-ray diffraction pattern that reports more gamma-form crystals than a comparable copolymer prepared with a Ziegler-Natta catalyst. These polypropylene polymers are made using a nonmetallocene, metal-centered, heteroaryl ligand catalyst. These polymers can be blended with other polymers, and are useful in the manufacture of films, sheets, foams, fibers and molded articles.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 68 OF 76 USPAT2 on STN
ACCESSION NUMBER: 2003:277273 USPAT2
TITLE: Crystallization of polypropylene using a
semi-crystalline, branched or coupled nucleating agent
INVENTOR(S): Stevens, James C., Richmond, TX, UNITED STATES
Vanderlende, Daniel D., Sugarland, TX, UNITED STATES
Ansems, Patricia, West Columbia, TX, UNITED STATES
PATENT ASSIGNEE(S): Dow Global Technologies Inc., Midland, MI, UNITED

STATES (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6927256	B2	20050809
APPLICATION INFO.:	US 2002-289145		20021105 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2002-378204P	20020505 (60)
	US 2001-338881P	20011106 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	GRANTED	
PRIMARY EXAMINER:	Nutter, Nathan M.	
LEGAL REPRESENTATIVE:	Whyte Hirschboeck Dudek SC	
NUMBER OF CLAIMS:	19	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	32 Drawing Figure(s); 22 Drawing Page(s)	
LINE COUNT:	3242	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method of nucleating a propylene homo- or copolymer, the method comprising contacting the propylene polymer with a semi-crystalline branched or coupled polymeric nucleating agent under nucleation conditions. In one embodiment, the propylene homopolymer is characterized as having .sup.13C NMR peaks corresponding to a regio-error at about 14.6 and about 15.7 ppm, the peaks of about equal intensity. In another embodiment, the copolymer is characterized as comprising at least about 60 weight percent (wt %) of units derived from propylene, and as having at least one of the following properties: (i) .sup.13C NMR peaks corresponding to a regio-error at about 14.6 and about 15.7 ppm, the peaks of about equal intensity, (ii) a B-value greater than about 1.4 when the comonomer content, i.e., the units derived from ethylene and/or the unsaturated comonomer(s), of the copolymer is at least about 3 wt %, (iii) a skewness index, S.sub.ix, greater than about -1.20, (iv) a DSC curve with a T.sub.me that remains essentially the same and a T.sub.max that decreases as the amount of comonomer, i.e., the units derived from ethylene and/or the unsaturated comonomer(s), in the copolymer is increased, and (v) an X-ray diffraction pattern that reports more gamma-form crystals than a comparable copolymer prepared with a Ziegler-Natta (Z-N) catalyst.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 69 OF 76 USPAT2 on STN
 ACCESSION NUMBER: 2003:277272 USPAT2
 TITLE: Impact resistant polymer blends of crystalline polypropylene and partially crystalline, low molecular weight impact modifiers
 INVENTOR(S): Stevens, James C., Richmond, TX, UNITED STATES
 Vanderlende, Daniel D., Sugarland, TX, UNITED STATES
 Ansems, Patricia, West Columbia, TX, UNITED STATES
 PATENT ASSIGNEE(S): Dow Global Technologies Inc., Midland, MI, UNITED STATES (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6943215	B2	20050913
APPLICATION INFO.:	US 2002-289122		20021105 (10)

NUMBER	DATE
--------	------

PRIORITY INFORMATION: US 2001-338881P 20011106 (60)
US 2002-378203P 20020505 (60)
DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Nutter, Nathan M.
LEGAL REPRESENTATIVE: Whyte Hirschboeck Dudek SC
NUMBER OF CLAIMS: 26
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 29 Drawing Figure(s); 20 Drawing Page(s)
LINE COUNT: 3275

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Polymer blends that exhibit good impact resistance comprise a crystalline polypropylene matrix and a partly crystalline copolymer impact modifier with a molecular weight lower than that of the matrix polymer. The matrix polymer can comprise any crystalline propylene homo- or copolymer. The impact modifying copolymers are characterized as comprising at least about 60 weight percent (wt %) of units derived from propylene and, in certain embodiments, as having at least one, preferably two or more, of the following properties: (i) ¹³C NMR peaks corresponding to a regio-error at about 14.6 and about 15.7 ppm, the peaks of about equal intensity, (ii) a B-value greater than about 1.4 when the comonomer content of the copolymer is at least about 3 wt %, (iii) a skewness index, S_{ix}, greater than about -1.20, (iv) a DSC curve with a T_{me} that remains essentially the same and a T_{max} that decreases as the amount of comonomer in the copolymer is increased, and (v) an X-ray diffraction pattern that reports more gamma-form crystals than a comparable copolymer prepared with a Ziegler-Natta (Z-N) catalyst.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 70 OF 76 USPAT2 on STN
ACCESSION NUMBER: 2003:276550 USPAT2
TITLE: Films comprising isotactic propylene copolymers
INVENTOR(S): Tau, Li-Min, Lake Jackson, TX, UNITED STATES
Chum, Pak-Wing S., Lake Jackson, TX, UNITED STATES
Karande, Seema, Pearland, TX, UNITED STATES
Bosnyak, Clive, Missouri City, TX, UNITED STATES
PATENT ASSIGNEE(S): Dow Global Technologies Inc., Midland, MI, UNITED STATES (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 7041765	B2	20060509
APPLICATION INFO.:	US 2002-289168		20021105 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-338881P	20011106 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	GRANTED	
PRIMARY EXAMINER:	Cheung, William K.	
LEGAL REPRESENTATIVE:	Whyte Hirschboeck Dudek SC	
NUMBER OF CLAIMS:	1	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	44 Drawing Figure(s); 34 Drawing Page(s)	
LINE COUNT:	3634	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Films with excellent machine direction (MD) tear properties comprise at least one layer made from a polymer comprising:

(A) at least 50 weight percent (wt%) propylene; and

(B) at least 5 wt % ethylene and/or one or more unsaturated comonomers. Representative of component (B) unsaturated comonomers are the C.sub.4-20 α -olefins, C.sub.4-20 dienes, styrenic compounds, and the like. Preferably, the film has at least one of a (i) haze value of less than about 10, (ii) 45 degree gloss of greater than about 65, and (iii) dart value of greater than about 100 g/mil. In one preferred embodiment, the layer comprises a copolymer characterized as having at least one of the following properties: (i) ¹³C NMR peaks corresponding to a regio-error at about 14.6 and about 15.7 ppm, the peaks of about equal intensity, (ii) a B-value greater than about 1.4 when the comonomer content, i.e., the units derived from ethylene and/or the unsaturated comonomer(s), of the copolymer is at least about 3 wt %, (iii) a skewness index, S.sub.ix, greater than about -1.20, (iv) a DSC curve with a T.sub.me that remains essentially the same and a T.sub.max that decreases as the amount of comonomer, i.e., the units derived from ethylene and/or the unsaturated comonomer(s), in the copolymer is increased, and (v) an X-ray diffraction pattern that reports more gamma-form crystals than a comparable copolymer prepared with a Ziegler-Natta (Z-N) catalyst.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 71 OF 76 USPAT2 on STN

ACCESSION NUMBER: 2003:251822 USPAT2

TITLE: Isotactic propylene copolymer
fibers, their preparation and use

INVENTOR(S): Stevens, James C., Richmond, TX, UNITED STATES
Vanderlende, Daniel D., Sugar Land, TX, UNITED STATES
Ethiopia, Samuel, Rosharon, TX, UNITED STATES

PATENT ASSIGNEE(S): Dow Global Technologies Inc., Midland, MI, UNITED STATES (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6906160	B2	20050614
APPLICATION INFO.:	US 2002-289138		20021105 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2002-380148P	20020505 (60)
	US 2001-338881P	20011106 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	GRANTED	
PRIMARY EXAMINER:	Nutter, Nathan M.	
LEGAL REPRESENTATIVE:	Whyte Hirschboeck Dudek SC	
NUMBER OF CLAIMS:	10	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	35 Drawing Figure(s); 25 Drawing Page(s)	
LINE COUNT:	3555	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Fibers comprising a propylene homopolymer or a copolymer of propylene and at least one of ethylene and one or more unsaturated comonomers exhibit desirable properties. The homopolymers are characterized as having ¹³C NMR peaks corresponding to a regio-error at about 14.6 and about 15.7 ppm, the peaks of about equal intensity. The copolymers

are characterized as (A) comprising at least about 60 weight percent (wt %) of units derived from propylene, and (B) having at least one of the following properties: (i) ^{13}C NMR peaks corresponding to a regio-error at about 14.6 and about 15.7 ppm, the peaks of about equal intensity, (ii) a B-value greater than about 1.4 when the comonomer content of the copolymer is at least about 3 wt %, (iii) a skewness index, $S_{\text{sub.ix}}$, greater than about -1.20, (iv) a DSC curve with a $T_{\text{sub.me}}$ that remains essentially the same and a $T_{\text{sub.max}}$ that decreases as the amount of comonomer in the copolymer is increased, and (v) an X-ray diffraction pattern that reports more gamma-form crystals than a comparable copolymer prepared with a Ziegler-Natta (Z-N) catalyst.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 72 OF 76 USPAT2 on STN

ACCESSION NUMBER: 2003:207057 USPAT2

TITLE: Film

INVENTOR(S): Seta, Yasushi, Kanagawa, JAPAN

Endoh, Masahiko, Chiba, JAPAN

PATENT ASSIGNEE(S): Idemitsu Petrochemical Co., Ltd., Tokyo, JAPAN
(non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6723446	B2	20040420
	WO 2001090227		20011129
APPLICATION INFO.:	US 2002-258608		20021105 (10)
	WO 2001-JP4269		20010522

	NUMBER	DATE
PRIORITY INFORMATION:	JP 2000-151446	20000523
	JP 2000-155798	20000526
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	GRANTED	
PRIMARY EXAMINER:	Tarazano, D. Lawrence	
LEGAL REPRESENTATIVE:	Oblon, Spivak, McClelland, Maier & Neustadt, P.C.	
NUMBER OF CLAIMS:	12	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	0 Drawing Figure(s); 0 Drawing Page(s)	
LINE COUNT:	1259	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides a wrap film or shrink film formed from a resin composition containing [I] a propylene polymer in an amount of 1 to 99 mass %, and [II] an olefin-based polymer in an amount of 99 to 1 mass %, wherein [I] the propylene polymer satisfies the following requirements of: (1) a meso pentad fraction (mmmm) is 0.2 to 0.6, and (2) a racemic pentad fraction (rrrr) and (1-mmmm) satisfy the following relation: $[\text{rrrr}/(1-\text{mmmm})] \leq 0.1$. The wrap film or shrink film exhibits excellent characteristics, and does not generate a toxic gas derived from chlorine, such as hydrogen chloride gas or dioxin, when being incinerated.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 73 OF 76 USPAT2 on STN

ACCESSION NUMBER: 2002:330392 USPAT2

TITLE: Flame-retardant polymer composition comprising polypropylene and an ethylene copolymer having high

S/N 10/551,682

INVENTOR(S): structural uniformity
Castellani, Luca, Corsico, ITALY
Grizante Redondo, Eduardo, Perdizes, BRAZIL
Zaopo, Antonio, Milan, ITALY
Albizzati, Enrico, Lesa, ITALY
PATENT ASSIGNEE(S): Pierelli Cavi E Sistemi.S.p.A., Milan, ITALY (non-U.S.
corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6756447	B2	20040629
APPLICATION INFO.:	US 2002-95704		20020313 (10)
RELATED APPLN. INFO.:	Division of Ser. No. US 2000-488829, filed on 21 Jan 2000, now patented, Pat. No. US 6410651 Continuation-in-part of Ser. No. US 1998-121558, filed on 23 Jul 1998, now patented, Pat. No. US 6255399		

	NUMBER	DATE
PRIORITY INFORMATION:	IT 1997-MI1739	19970723
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	GRANTED	
PRIMARY EXAMINER:	Egwim, Kelechi C.	
LEGAL REPRESENTATIVE:	Finnegan, Henderson, Farabow, Garrett, & Dunner, L.L.P.	
NUMBER OF CLAIMS:	15	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	4 Drawing Figure(s); 3 Drawing Page(s)	
LINE COUNT:	644	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A flame-retardant polymer composition includes: (a) a crystalline propylene homopolymer or copolymer; (b) a copolymer of ethylene with at least one alpha-olefin having from 4 to 12 carbon atoms, and optionally with a diene; and (c) a flame-retardant inorganic filler. Copolymer (b) has a density of between 0.90 and 0.86 g/cm.^{sup.3} and a Composition Distribution Index, defined as the weight percentage of copolymer molecules having an alpha-olefin content within 50% of the average total molar content of alpha-olefin, of greater than 45%.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L9 ANSWER 74 OF 76 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2005:442543 CAPLUS
DOCUMENT NUMBER: 143:115963
TITLE: Studies on the intermolecular structural heterogeneity
of a propylene-ethylene random
copolymer using preparative
temperature rising elution
fractionation
AUTHOR(S): Liu, Yonggang; Bo, Shuqin; Zhu, Yejuan; Zhang, Wenhe
CORPORATE SOURCE: State Key Laboratory of Polymer Physics and Chemistry,
Changchun Institute of Applied Chemistry, Chinese
Academy of Sciences, Changchun, 130022, Peop. Rep.
China
SOURCE: Journal of Applied Polymer Science (2005), 97(1),
232-239
CODEN: JAPNAB; ISSN: 0021-8995
PUBLISHER: John Wiley & Sons, Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The intermol. structural heterogeneity of a propylene-

ethylene random copolymer was studied by preparative temperature rising elution fractionation combined with GPC, ¹³C-NMR, differential scanning calorimetry, and wide-angle X-ray diffraction anal. of the obtained fractions. The isotacticity of fractions increased with increasing elution temperature, and the ethylene content decreased monotonously. Fitting of the obtained comonomer triad sequences by Bernoullian and first-order Markovian statistical models indicated that lower isospecific active sites are more active toward ethylene. The isolated ethylene unit disrupted the crystallizable isotactic sequence and lowered the crystallizability of the polypropylene chain.

REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 75 OF 76 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:857652 CAPLUS

DOCUMENT NUMBER: 141:333014

TITLE: Impact-resistant polyolefin compositions

INVENTOR(S): News, Jean; Massari, Paola; Zimmermann, Hans-Juergen

PATENT ASSIGNEE(S): Basell Poliolefine Italia S.P.A., Italy

SOURCE: PCT Int. Appl., 25 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004087807	A1	20041014	WO 2004-EP3307	20040329
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2004226245	A1	20041014	AU 2004-226245	20040329
CA 2520277	A1	20041014	CA 2004-2520277	20040329
EP 1608703	A1	20051228	EP 2004-724002	20040329
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK				
BR 2004009519	A	20060418	BR 2004-9519	20040329
CN 1768108	A	20060503	CN 2004-80008642	20040329
JP 2006522186	T	20060928	JP 2006-504899	20040329
MX 2005PA10567	A	20060330	MX 2005-PA10567	20050930
IN 2005CN02509	A	20070831	IN 2005-CN2509	20051003
US 2007010625	A1	20070111	US 2006-551682	20060719
PRIORITY APPLN. INFO.:			EP 2003-7669	A 20030403
			WO 2004-EP3307	W 20040329

OTHER SOURCE(S): MARPAT 141:333014

AB The olefin polymer composition comprises (A) 60-95% a propylene homopolymer or copolymer having polydispersity index 4.6-10 and content of isotactic pentads (measured by ¹³C NMR on the fraction insol. in xylene at 25°) >98 M; (B) 5-40% a copolymer of ethylene containing 40-70% propylene and/or

C4-10 α -olefins, and optionally minor proportions of a diene; wherein the composition has temperature rising elution fractionation (TREF) profile (obtained by fractionation in xylene and collection of fractions at temps. of 40°, 80° and 90°) satisfying the following relation $Y \leq -0.8 + 0.035X + 0.0091X^2$ (X = ethylene content of the fraction collected at 40°; Y = ethylene content of the fraction collected at 90°), and intrinsic viscosity $[\eta]$ (in xylene at 25°) 1.8-4.2 dL/g. A polymerization catalyst in the polymerization process is a Ziegler-Natta catalyst comprising a solid catalyst containing (a) Mg, Ti, halogen (e.g., $TiCl_4$ and $MgCl_2 \cdot 2.8 C_2H_5OH$) and an electron donor selected from succinates (e.g., di-Et 2,3-diisopropylsuccinate), (b) an alkylaluminum compound (e.g., aluminum triethyl), and optionally (c) ≥ 1 electron-donor compound (e.g., dicyclopentyl dimethoxysilane).

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 76 OF 76 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1994:701790 CAPLUS

DOCUMENT NUMBER: 121:301790

TITLE: Temperature rising elution fractionation (TREF) characterization of polypropylene copolymers

AUTHOR(S): Mirabella, Francis M., Jr.

CORPORATE SOURCE: Process Research Center, Quantum Chemical, Corp., Morris, IL, 60450, USA

SOURCE: Journal of Liquid Chromatography (1994), 17(14-15), 3201-19

CODEN: JLCHD8; ISSN: 0148-3919

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The fractionation by temperature rising elution fractionation (TREF) of poly(propylene-ethylene) copolymers containing a minor fraction of ethylene was described. A method was developed to determine the ethylene concentration distribution in these copolymers. A poly(propylene-ethylene) copolymer containing 29% weight ethylene was fractionated by preparative TREF. The fractions were analyzed by anal. TREF, and by ^{13}C -NMR spectroscopy to determine the average ethylene concentration in each fraction. A calibration curve relating anal.

TREF elution temperature and ethylene concentration was established. The weight-average TREF elution temperature was the appropriate average elution temperature to correlate with the weight percent ethylene determined by ^{13}C -NMR spectroscopy. This calibration curve was used to obtain the ethylene concentration distribution for a series of poly(propylene-ethylene) copolymers from their anal. TREF elution temperature chromatograms. The average ethylene concentration was calculated from these ethylene concentration distributions and found to be in good agreement with the ethylene concentration determined by ^{13}C NMR. Extrapolation of the calibration curve to 0% ethylene yielded a predicted anal. TREF elution temperature of 108.7°, which was in excellent agreement with the exptl. elution temperature for isotactic polypropylene of 108.7°.

L9 ANSWER 73 OF 76 USPAT2 on STN

ACCESSION NUMBER: 2002:330392 USPAT2

TITLE: Flame-retardant polymer composition comprising polypropylene and an ethylene copolymer having high structural uniformity

INVENTOR(S): Castellani, Luca, Corsico, ITALY
Grizante Redondo, Eduardo, Perdizes, BRAZIL
Zaopo, Antonio, Milan, ITALY
Albizzati, Enrico, Lesa, ITALY

PATENT ASSIGNEE(S): Pierelli Cavi E Sistemi.S.p.A., Milan, ITALY (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6756447	B2	20040629
APPLICATION INFO.:	US 2002-95704		20020313 (10)
RELATED APPLN. INFO.:	Division of Ser. No. US 2000-488829, filed on 21 Jan 2000, now patented, Pat. No. US 6410651		
	Continuation-in-part of Ser. No. US 1998-121558, filed on 23 Jul 1998, now patented, Pat. No. US 6255399		

	NUMBER	DATE
PRIORITY INFORMATION:	IT 1997-MI1739	19970723
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	GRANTED	
PRIMARY EXAMINER:	Egwim, Kelechi C.	
LEGAL REPRESENTATIVE:	Finnegan, Henderson, Farabow, Garrett, & Dunner, L.L.P.	
NUMBER OF CLAIMS:	15	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	4 Drawing Figure(s); 3 Drawing Page(s)	
LINE COUNT:	644	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM (1) isotactic propylene homopolymers with an isotactic index of greater than 80, preferably greater than 90, even more preferably greater than 95;

SUMM (3) crystalline copolymers of propylene with ethylene and/or an alpha-olefin having from 4 to 10 carbon atoms, with an overall content of ethylene and/or alpha-olefin of less than 10 mol %;

SUMM (4) heterogeneous propylene copolymers obtainable by block polymerization of propylene and of mixtures of propylene with ethylene and/or an alpha-olefin having from 4 to 10 carbon atoms, containing at least 70% by weight of polypropylene homopolymer or of crystalline propylene/ethylene copolymer, with an isotactic index of greater than 80, the remainder consisting of an elastomeric ethylene/propylene copolymer with a propylene content of from 30 to 70% by weight;

DETD The properties of the polymer materials used according to the present invention (Cop. 1 and 2) and of the material used for comparative purposes (Cop. 3) are given in Table 1. As melting enthalpy the second melting value ($\Delta H_{sub.2m}$) is given, obtained by DSC at a scan speed of 10° C./min. The melt flow index (MFI) was measured according to ASTM standard D 1238/L (at 230° C. and 21.6 N for polypropylene, and at 190° C. and 21.6 N for ethylene/1-octene copolymers). The Composition

S/N 10/551,682

Distribution Index (CDI) was determined by Temperature
Rising Elution Fractionation techniques.

DETD

TABLE 1

Polymer Density MFI ΔH .sub.2m
material (g/cm.sup.3) (dg/min) CDI (J/g)

PP 1 0.9 1.6 -- 98
PP 2 0.9 1.8 -- 90
Cop. 1 0.885 1 >70 55.6
Cop. 2 0.868 0.5 >70 34.4
Cop. 3 0.902 3 -- 78

PP 1 (Moplen ® S30G-Montell): isotactic polypropylene
(homopolymer);

PP 2 (Moplen ® EP2S30B-Montell): random crystalline propylene
/ethylene copolymer;

Cop. 1 (Engages ® 8003-DuPont-Dow Elastomers): ethylene/1-octene copolymer
with 82/18 weight ratio (5.5 mol % of 1-octene), obtained by metallocene
catalysis;

Cop. 2 (Engages 8150 ® -DuPont-Dow Elastomers): ethylene/1-octene copolymer
with 75/25 weight ratio (7.6 mol % of 1-octene), obtained by metallocene
catalysis;

Cop. 3 (Stamylex ® TMX 1000-DSM): ethylene/1-octene copolymer (4.6 mol % of
1-octene), obtained using a titanium Ziegler-Natta catalyst.

=> d 19 57 ibib hit

L9 ANSWER 57 OF 76 USPAT2 on STN

ACCESSION NUMBER: 2006:167984 USPAT2

TITLE: Impact resistance polymer blends of crystalline
polypropylene and partially crystalline, low molecular
weight impact modifiers

INVENTOR(S): Stevens, James C., Richmond, TX, UNITED STATES
Vanderlende, Daniel D., Sugarland, TX, UNITED STATES
Ansems, Patricia, West Columbia, TX, UNITED STATES

PATENT ASSIGNEE(S): Dow Global Technologies Inc., Midland, MI, UNITED
STATES (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 7250471	B2	20070731
APPLICATION INFO.:	US 2006-359091		20060222 (11)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 2004-884420, filed on 2 Jul 2004, Pat. No. US 7109269 Division of Ser. No. US 2002-289122, filed on 5 Nov 2002, Pat. No. US 6943215		

	NUMBER	DATE
PRIORITY INFORMATION:	US 2002-378203P	20020505 (60)
	US 2001-338881P	20011106 (60)

DOCUMENT TYPE: Utility

FILE SEGMENT: GRANTED

PRIMARY EXAMINER: Nutter, Nathan M.

LEGAL REPRESENTATIVE: Whyte Hirschboeck Dudek SC

NUMBER OF CLAIMS: 18

EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 29 Drawing Figure(s); 20 Drawing Page(s)

LINE COUNT: 3274

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM This invention relates to polymer blends. In one aspect, the invention relates to polymer blends comprising a polypropylene matrix and an impact modifier while in another aspect, the invention relates to polymer blends in which the matrix comprises an isotactic homopolymer of propylene and the impact modifier comprises an isotactic copolymer of propylene, ethylene and/or one or more unsaturated comonomers. In yet another aspect, the invention relates to processes for preparing and using the polypropylene impact copolymers, and articles made from the copolymers.

SUMM Crystalline polypropylene, typically a homopolymer, is used extensively in various moldings because it exhibits desirable mechanical (e.g., rigidity) and chemical resistance properties. For applications that require impact resistance (e.g., automobile parts, appliance facia, packaging, etc.), a rubber, e.g., copolymer of propylene and ethylene and/or one or more α -olefins, is used, or a blend of crystalline polypropylene with one or more rubbers that exhibit good impact resistance, e.g., propylene/ethylene (P/E) copolymer, or ethylene-propylene (EP) and/or ethylene-propylene-diene (EPDM) rubber. Crystalline polypropylene has an isotactic structure, and it is readily produced using a Ziegler-Natta (Z-N) or a metallocene catalyst, or a constrained geometry catalyst (CGC). For purposes of this disclosure, P/E copolymers comprise 50 weight percent or more propylene while EP copolymers comprise 51 weight percent or more ethylene. As here used, "comprise . . . propylene", "comprise . . . ethylene" and similar terms mean that the polymer comprises units derived from propylene, ethylene or the like as opposed to the compounds themselves.

SUMM In a fourth embodiment, the invention is a blend in which the matrix polypropylene is characterized as having a ¹³C NMR peaks corresponding to a regio-error at about 14.6 and about 15.7 ppm, the peaks of about equal intensity and, optionally, substantially isotactic propylene sequences, i.e., the sequences have an isotactic triad (mm) measured by ¹³C NMR of greater than about 0.85. These propylene homopolymers typically have at least 50 percent more of this regio-error than a comparable polypropylene homopolymer prepared with a Ziegler-Natta catalyst. A "comparable" polypropylene as here used means an isotactic propylene homopolymer having the same weight average molecular weight, i.e., within plus or minus 10 wt %. In this disclosure, occasionally these propylene homopolymers are referred to as "P* homopolymers" or a similar term. The impact modifier of this embodiment is at least one polymer of the propylene/ethylene and propylene/unsaturated comonomer polymers described in the second and third embodiments of this invention (occasionally referred to in this disclosure, individually and collectively, as a "P/E* copolymer" or a similar term). The blend is, of course, a heterophasic mix in which the polypropylene matrix polymer is the continuous phase and the impact modifying polymer is the discontinuous or dispersed phase. P/E* copolymers are a unique subset of P/E copolymers.

SUMM In a fifth embodiment, one or both blend components is itself a blend of one or more polymers. The polypropylene matrix polymer can be a blend of two or more polypropylenes (either or both of which are homo- or copolymers), and either or both of which can exhibit ¹³C NMR peaks corresponding to a regio-error at about 14.6 and about 15.7 ppm, the

peaks of about equal intensity and, optionally, substantially isotactic propylene sequences. The relative amounts of each can vary widely. Alternatively, the polypropylene matrix polymer can be a blend of two or more crystalline polypropylenes in combination with one or more other crystalline polymers, e.g., high density polyethylene (HDPE). In this embodiment, the other crystalline polymer is sufficiently compatible with the crystalline polypropylene such that the blend of these matrix polymers form a substantially homogeneous continuous phase when in combination with the impact modifying copolymer. Typically, the crystalline polypropylene comprises at least about 50 percent by weight of the matrix polymer blend.

- DRWD FIG. 4 shows a comparison of the Tg data of a P/E* copolymer and a conventional constrained geometry catalyst (CGC) P/E copolymer at the same ethylene content.
- DETD For propylene polymers made with a metallocene catalyst, the B-values are typically between 1.1 and 1.3. For propylene polymers made with a constrained geometry catalyst, the B-values are typically between 0.9 and 1.0. In contrast, the B-values of the P/E* polymers, typically made with an activated nonmetallocene, metal-centered, heteroaryl ligand catalyst, are above about 1.4, typically between about 1.5 and about 1.85. In turn, this means that for any P/E* copolymer, not only is the propylene block length relatively short for a given percentage of ethylene but very little, if any, long sequences of 3 or more sequential ethylene insertions are present in the copolymer, unless the ethylene content of the polymer is very high. FIG. 1 and the data of the following tables are illustrative. The catalysts are activated nonmetallocene, metal-centered, heteroaryl ligand catalysts, and these made polymers of this invention. The Catalyst E is a metallocene catalyst, and it did not make the P/E* polymers. Interestingly, the B-values of the P/E* polymers remained high even for polymers with relatively large amounts, e.g., >30 mole %, ethylene.
- DETD FIG. 4 illustrates that the P/E* polymers also have a lower Tg at an equivalent ethylene content than a similar propylene polymer made with a constrained geometry catalyst (CGC) and this, in turn, means that the P/E* polymers are likely to exhibit better low temperature toughness than the CGC propylene polymers making the P/E* polymers attractive candidates for food packaging applications.
- DETD While TREF was originally applied to copolymers of ethylene and higher α -olefins, it can also be used for the analysis of copolymers of propylene with ethylene (or higher α -olefins). The analysis of copolymers of propylene requires higher temperatures for the dissolution and crystallization of pure, isotactic polypropylene, but most of the copolymerization products of interest elute at similar temperatures as observed for copolymers of ethylene. The following table is a summary of conditions used for the analysis of copolymers of propylene. Except as noted the conditions for TREF are consistent with those of Wild, et al., *ibid*, and Hazlitt, *Journal of Applied Polymer Science: Appl. Polym. Symp.*, 45, 25(1990).
- DETD The data obtained from TREF are expressed as a normalized plot of weight fraction as a function of elution temperature. The separation mechanism is analogous to that of copolymers of ethylene, whereby the molar content of the crystallizable component (ethylene) is the primary factor that determines the elution temperature. In the case of copolymers of propylene, it is the molar content of isotactic propylene units that primarily determines the elution temperature. FIG. 5 is a representation of the typical type of distribution one would expect for

a propylene/ethylene copolymer made with a metallocene polymer and an example of the current invention.

DETD The P* and P/E* polymers are further characterized as having substantially isotactic propylene sequences. "Substantially isotactic propylene sequences" and similar terms mean that the sequences have an isotactic triad (mm) measured by ^{13}C NMR of greater than about 0.85, preferably greater than about 0.90, more preferably greater than about 0.92 and most preferably greater than about 0.93. Isotactic triads are well known in the art and are described in, for example, U.S. Pat. No. 5,504,172 and WO 00/01745 which refer to the isotactic sequence in terms of a triad unit in the copolymer molecular chain determined by ^{13}C NMR spectra. NMR spectra are determined as follows.

DETD ^{13}C NMR spectroscopy is one of a number of techniques known in the art of measuring comonomer incorporation into a polymer. An example of this technique is described for the determination of comonomer content for ethylene/ α -olefin copolymers in Randall (Journal of Macromolecular Science, Reviews in Macromolecular Chemistry and Physics, C29 (2 & 3), 201-317 (1989)). The basic procedure for determining the comonomer content of an olefin interpolymer involves obtaining the ^{13}C NMR spectrum under conditions where the intensity of the peaks corresponding to the different carbons in the sample is directly proportional to the total number of contributing nuclei in the sample. Methods for ensuring this proportionality are known in the art and involve allowance for sufficient time for relaxation after a pulse, the use of gated-decoupling techniques, relaxation agents, and the like. The relative intensity of a peak or group of peaks is obtained in practice from its computer-generated integral. After obtaining the spectrum and integrating the peaks, those peaks associated with the comonomer are assigned. This assignment can be made by reference to known spectra or literature, or by synthesis and analysis of model compounds, or by the use of isotopically labeled comonomer. The mole % comonomer can be determined by the ratio of the integrals corresponding to the number of moles of comonomer to the integrals corresponding to the number of moles of all of the monomers in the interpolymer, as described in Randall, for example.

DETD The comparison of several ^{13}C NMR spectra further illustrates the unique regio-errors of the P/E* polymers used in the practice of this invention. FIGS. 6 and 7 are the spectra of the propylene homopolymer products of Examples 7 and 8, respectively, each made with an activated nonmetallocene, metal-centered, heteroaryl ligand catalyst. The spectrum of each polymer reports a high degree of isotacticity and the unique regio-errors of these P/E* polymers. FIG. 8 is the ^{13}C NMR spectrum of the propylene-ethylene copolymer of Example 2, made with the same catalyst used to make the propylene homopolymer of Example 7, and it too reports a high degree of isotacticity and the same regio-errors of the propylene homopolymers of FIGS. 6 and 7. The presence of the ethylene comonomer does not preclude the occurrence of these unique regio-errors. The ^{13}C NMR spectrum of FIG. 9 is that of the propylene-ethylene copolymer product of Comparative Example 1 which was prepared using a metallocene catalyst. This spectrum does not report the regio-error (around 15 ppm) characteristic of the P/E* polymers used in the practice of this invention.

DETD In an alternative embodiment possibly outside the scope of scheme 3, for isotactic polypropylene production, it is currently preferred that R_{sup.14} is either hydrogen or methyl.

DETD The following procedure may be carried out to obtain a P/E* copolymer: In a stirred-tank reactor propylene monomer is introduced continuously together with solvent, and ethylene monomer. The reactor contains a liquid phase composed substantially of ethylene and propylene monomers

together with any solvent or additional diluent. If desired, a small amount of a "H"-branch inducing diene such as norbornadiene, 1,7-octadiene or 1,9-decadiene may also be added. A nonmetallocene, metal-centered, heteroaryl ligand catalyst and suitable cocatalyst are continuously introduced in the reactor liquid phase. The reactor temperature and pressure may be controlled by adjusting the solvent/monomer ratio, the catalyst addition rate, as well as by cooling or heating coils, jackets or both. The polymerization rate is controlled by the rate of catalyst addition. The ethylene content of the polymer product is determined by the ratio of ethylene to propylene in the reactor, which is controlled by manipulating the respective feed rates of these components to the reactor. The polymer product molecular weight is controlled, optionally, by controlling other polymerization variables such as the temperature, monomer concentration, or by a stream of hydrogen introduced to the reactor, as is known in the art. The reactor effluent is contacted with a catalyst kill agent, such as water. The polymer solution is optionally heated, and the polymer product is recovered by flashing off unreacted gaseous ethylene and propylene as well as residual solvent or diluent at reduced pressure, and, if necessary, conducting further devolatilization in equipment such as a devolatilizing extruder or other devolatilizing equipment operated at reduced pressure. For a solution polymerization process, especially a continuous solution polymerization, preferred ranges of propylene concentration at steady state are from about 0.05 weight percent of the total reactor contents to about 50 weight percent of the total reactor contents, more preferably from about 0.5 weight percent of the total reactor contents to about 30 weight percent of the total reactor contents, and most preferably from about 1 weight percent of the total reactor contents to about 25 weight percent of the total reactor contents. The preferred range of polymer concentration (otherwise known as % solids) is from about 3% of the reactor contents by weight to about 45% of the reactor contents or higher, more preferably from about 10% of the reactor contents to about 40% of the reactor contents, and most preferably from about 15% of the reactor contents to about 40% of the reactor contents.

DETD In some embodiments, ethylene is added to the reaction vessel in an amount to maintain a differential pressure in excess of the combined vapor pressure of the propylene and diene monomers. The ethylene content of the polymer is determined by the ratio of ethylene differential pressure to the total reactor pressure. Generally the polymerization process is carried out with a pressure of ethylene of from 10 to 1000 psi (70 to 7000 kPa), most preferably from 40 to 800 psi (30 to 600 kPa). The polymerization is generally conducted at a temperature of from 25 to 250° C., preferably from 75 to 200° C., and most preferably from greater than 95 to 200° C.

DETD Differences in melting behavior are most easily seen with the aid of figures. FIG. 13 compares the melting endotherms of Samples 8 and 22a. These two propylene/ethylene copolymers have nearly equivalent heats of melting and mole percent ethylene contents, about 71 J/g and 8 mole %. However, despite these similarities, the melting behavior of the inventive copolymer (Sample 8) is surprisingly different than that of the comparative copolymer (Sample 22a). The melting endotherm of Sample 8 is shifted towards lower temperatures and significantly broadened, when comparing at equivalent heat of melting. These changes in melting behavior are unique to and characteristic of the copolymers of this invention.

DETD Blend 13-1 shows much lower haze compared to blend 13-2 and slightly better modulus; the same is true for blend 13-3 versus blend 13-4 (comparison of blends containing the same rubber content, and containing

S/N 10/551,682

rubbers that have the same ethylene content but were prepared via different catalysis).

=> FIL STNGUIDE

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	301.47	302.52
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	-2.40	-2.40

FILE 'STNGUIDE' ENTERED AT 18:47:10 ON 27 MAR 2008
USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT
COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

FILE CONTAINS CURRENT INFORMATION.
LAST RELOADED: Mar 21, 2008 (20080321/UP).

=> log y

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	0.06	302.58
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	0.00	-2.40

STN INTERNATIONAL LOGOFF AT 18:47:33 ON 27 MAR 2008